



GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS TELECOMMUNICATION ENGINEERING CENTRE Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

CERTIFICATE OF DESIGNATION

M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory)

has been assessed and designated as Conformity Assessment Body (CAB) for its facilities at

Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

In the field of Testing

Certificate No. TEC/MRA/CAB/IND-D/83

Issue Date: 30/08/2022

Valid Until: 29/08/2025

This Certificate remains valid for the Scope of Designation as specified in the Annexure subject to the continued validity of NABL Accreditation and satisfied compliance to the Standards/specifications against which lab has been designated and strict compliance to the relevant terms and conditions of TEC CAB Designation Scheme.

(To see the scope of designation of this laboratory, you may also visit TEC website www.tec.gov.in)

Signed for and on behalf of TEC

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Prasanth Kumar Deputy Director General (MTCTE) For Designating Authority TEC

Certificate No: TEC/MRA/CAB/IND-D/83 dated 30/08/2022 issued to M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli



Validity: - 30/08/2022 to 29/08/2025

Terms & Conditions

This certificate is issued as per the terms and conditions stipulated in the TEC SCHEME FOR CONFORMITY ASSESEMENT BODIES AND DOMESTIC DESIGNATING CERTIFICATION BODIES FOR CONFORMITY ASSESSMENT AND CERTIFICATION OF TELECOMMUNICATION EQUIPMENT ISSUE 2 NO. TEC/DES-01/02.DEC.2017.

Some of the conditions are reiterated as under:

A. Obligations of the Designated CAB.

- It shall ensure that it maintains its accreditation status from any recognised Indian 1. accreditation body like NABL during validity period of certificate.
- It shall follow the stipulated procedures, rules and policies laid down by Designating 2. Authority (DA) or Mutual Recognition Agreement (MRA)* partner for testing and evaluation.
- 3. In respect of tests for which it is seeking designation, it shall have no interest whatsoever in any business to carry on testing in an unfair or biased manner.
- 4. It shall fully indemnify DA from and against all liabilities, damages, claims, costs, and expenses incurred or sustained by DA as a result of any action taken or omitted by DA relating to the process of designation.
- 5. It shall comply with DA's or MRA partner's terms and conditions for designation and recognition as modified from time to time.
- 6. It shall be under obligation to participate in the online process prescribed by TEC for test and certification against TEC's GR/IR/ER and standards.
- 7. It shall have a record system which shall have a retention period of at least 5 years for documents related to the equipment testing. It shall maintain all the relevant documents including list of products submitted for testing, product-wise testing and evaluation reports. These documents shall be produced before the DA within seven days, as and when required.
- 8. It shall ensure the Intellectual Property Rights of the customers in the course of testing by maintaining professional ethics, secrecy and keeping all the product related information confidential.

*Applicable only if recognized by MRA (Mutual Recognition Agreement) partner.

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- 9. It shall notify the DA in writing of occurrence of any of the following incident(s) within 2 weeks of its occurrence
 - a) Cessation of its business of conformity assessment for which it is Designated or accredited
 - b) Changes in its legal, commercial, or Organisational status
 - c) Changes, which may affect continuing compliance with any of the criteria or requirement specified by DA or MRA partner.
 - d) Change of premises

B. REFERENCE TO DESIGNATION STATUS

- 1. Designated CABs may advertise their designation status with regard to standards or parts thereof which are included in the scope of designation.
- The advertisement should not imply, or otherwise suggest that DA or MRA Partner has endorsed the product or imply that the designated CAB is an agent or representative of DA or MRA Partner.
- CABs whose designations have been suspended or withdrawn for any reason, shall discontinue advertisement of their designated status and not make any misleading statements regarding their designation status.

C. POST-DESIGNATION SURVEILLANCE

As and when required, DA shall conduct surveillance assessments and other nonroutine assessments on the Designated CABs to ensure that standards of practices are maintained as well as to investigate complaints made against them.

D. SUSPENSION OR WITHDRAWAL OF DESIGNATION

- 1. DA shall suspend or withdraw the designation of a CAB if
 - a. Its accreditation is withdrawn.
 - b. It is found that the CAB is not complying with the stipulated criteria or requirements.
 - c. It is guilty of any offence involving fraud or dishonesty.
 - d. DA concludes that there is a just cause for withdrawing the designation.
- A CAB whose designation, and recognition in case of MRA, has been suspended or withdrawn shall be removed from the list of designated CABs, in case it fails to take corrective measures.
- DA shall keep the designation of a Designated CAB under suspension, until the completion of formal review process.

E. AMENDMENT TO THE SCHEME

DA reserves the rights to amend the scheme, as and when required, for the purpose of streamlining designation process. \bigcirc

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Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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Validity: 30/08/2022 to 29/08/2025

Last Amended on:

AD (CA), TEC

SI. Telecom No. Equipment/ Product		Test Parameter or Type of Testing		Standard/ Specification
1	Optical Fibre (Single Mode)	Mode Field Diameter	for 1310 nm for Optical Fibre (ITU-T G.652.D) IEC 60793-1-45	TEC ER No. TEC70012206
			for 1550 nm for Optical Fibre (ITU-T G.655) IEC 60793-1-45	TEC ER No. TEC70012206
			for 1550 nm for Optical Fibre (ITU-T G.656) IEC 60793-1-45	TEC ER No. TEC70012206
			for 1310 nm for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-45	TEC ER No. TEC70012200
			for 1310 nm for Optical Fibre (ITU-T G.657.A2) IEC 60793-1-45	TEC ER No. TEC70012200
			for 1310 nm for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-45	TEC ER No. TEC70012200

/OKmp Director (CA), TEC



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Validity: 30/08/2022 to 29/08/2025

Last Amended on:

SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
_	Optical Fibre (Single Mode)	Cladding Diameter	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-20	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.655) IEC 60793-1-20	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.656) IEC 60793-1-20	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-20	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.A2) IEC 60793-1-20	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-20	TEC ER No. TEC70012206
		Cladding Non- Circularity	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-20	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.655) IEC 60793-1-20	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.656) IEC 60793-1-20	TEC ER No. TEC70012206

Director (CA), TEC

AD (CA), TEC



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Last Amended on:

Sl. Telecom No. Equipment/ Product		Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre (Single Mode)	Cladding Non- Circularity	for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-20	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.A2) IEC 60793-1-20	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-20	TEC ER No. TEC70012206
		Core Clad Concentricity	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-20, IEC 60793-2-50	TEC ER No. TEC70012206
		error	for Optical Fibre (ITU-T G.655) IEC 60793-1-20, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.656) IEC 60793-1-20, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-20, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.A2) IEC 60793-1-20, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-20, IEC 60793-2-50	TEC ER No. TEC70012206

Director (CA), TEC

AD'(CA), TEC



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Validity: 30/08/2022 to 29/08/2025

Last Amended on: _

SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre (Single Mode)	Coating/ Cladding	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012206
		Concentricity	for Optical Fibre (ITU-T G.655) IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.656) IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.A1) (i) 200 μm fibre (ii) 250 μm fibre IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.A2) (i) 200 μm fibre (ii) 250 μm fibre IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012206
		Coating Diameter	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.655) IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012206

Director (CA), TEC *The validity of Cert AD (CA), TEC

DEPARTMENT OF TELECOMMUNICATIONS TELECOMMUNICATION ENGINEERING CENTRE

GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS



Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Validity: 30/08/2022 to 29/08/2025

Last Amended on:

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Sl. Telecom No. Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
Optical Fibre (Single Mode)	Coating Diameter	for Optical Fibre (ITU-T G.656) IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012200
		for Optical Fibre (ITU-T G.657.A1) (i) 200 μm fibre (ii) 250 μm fibre IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012206
		for Optical Fibre (ITU-T G.657.A2) (i) 200 μm fibre (ii) 250 μm fibre IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012206
		for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70012206
	Attenuation of Uncabled Fibre	for Optical Fibre (ITU-T G.652.D) (i) at 1310 nm (ii) at 1550 nm (iii) at 1550 nm (iv) at 1270 nm (v) at 1625 nm (vi) water peak attenuation at 1380 to 1390 nm IEC 60793-1-40	TEC ER No. TEC70012206

Director (CA), TEC

GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS TELECOMMUNICATION ENGINEERING CENTRE Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001



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Validity: 30/08/2022 to 29/08/2025

Last Amended on:

AD (CA), TEC

SI. Telecom No. Equipment/ Product		Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre (Single Mode)	Attenuation of Uncabled Fibre	for Optical Fibre (ITU-T G.655) (i) at 1550 nm (ii) at 1625 nm IEC 60793-1-40	TEC ER No. TEC70012200
			for Optical Fibre (ITU-T G.656) (i) at 1460 nm (ii) at 1550 nm (iii) at 1625 nm (iv) at 1383 nm IEC 60793-1-40	TEC ER No. TEC70012200
			for Optical Fibre (ITU-T G.657.A1) (i) at 1310 nm (ii) at 1550 nm (iii) at 1490 nm (iv) at 1270 nm (v) at 1625 nm (vi) water peak attenuation at 1380 to 1390 nm IEC 60793-1-40	TEC ER No. TEC70012206

Director (CA), TEC



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Validity: 30/08/2022 to 29/08/2025

Last Amended on:

SI. Telecom No. Equipment/ Product		Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre (Single Mode)	Attenuation of Uncabled Fibre	for Optical Fibre (ITU-T G.657.A2) (i) at 1310 nm (ii) at 1550 nm (iii) at 1550 nm (iv) at 1490 nm (iv) at 1270 nm (v) at 1625 nm (vi) water peak attenuation at 1380 to 1390 nm IEC 60793-1-40	TEC ER No. TEC70012200
			for Optical Fibre (ITU-T G.657.B3) (i) at 1310 nm (ii) at 1550 nm (iii) at 1550 nm (iv) at 1270 nm (v) at 1270 nm (v) at 1625 nm (vi) water peak attenuation at 1380 to 1390 nm IEC 60793-1-40	TEC ER No. TEC70012206

Director (CA), TEC AĎ (CA), TEC *The validity of Certificate is up to 29/08/2025 or the continued validity of NABL Accreditation, whichever is earlier.

GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS TELECOMMUNICATION ENGINEERING CENTRE Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001



SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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Specification

Validity: 30/08/2022 to 29/08/2025

Telecom

No. Equipment/

SI.

Test Parameter or Type of Testing Standard/

Product			
Optical Fibre (Single Mode)	Chromatic Dispersion	for Optical Fibre (ITU-T G.652.D) (i) at 1550 nm (ii) at 1625 nm (iii) in 1285-1330 nm band (iv) in 1270-1340 nm band IEC 60793-1-42, IEC 60793-2-50	TEC ER No. TEC70012206
		for Optical Fibre (ITU-T G.657.A1) (i) at 1550 nm (ii) at 1625 nm (iii) in 1285-1330 nm band (iv) in 1270-1340 nm band IEC 60793-1-42, IEC 60793-2-50	TEC ER No. TEC70012206
		for Optical Fibre (ITU-T G.657.A2) (i) at 1550 nm (ii) at 1625 nm (iii) in 1285-1330 nm band (iv) in 1270-1340 nm band IEC 60793-1-42, IEC 60793-2-50	TEC ER No. TEC70012206

Director (CA), TEC



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Validity: 30/08/2022 to 29/08/2025

SI. Telecom Test Parameter or Type of Testing Standard/ Specification No. Equipment/ Product Chromatic **Optical Fibre** for Optical Fibre (ITU-T G.657.B3) TEC ER No. Dispersion TEC70012206 (Single Mode) (i) at 1550 nm (ii) at 1625 nm (111) in 1995 1990 mm h.

		(iii) in 1285-1330 nm band (iv) in 1270-1340 nm band IEC 60793-1-42, IEC 60793-2-50	
	Zero Dispersion	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-42	TEC ER No. TEC70012206
	Slope	for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-42	TEC ER No. TEC70012206
		for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-42	TEC ER No. TEC70012206
		for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-42	TEC ER No. TEC70012206
	Zero Dispersion	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-42	TEC ER No. TEC70012206
	Wavelength range	for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-42	TEC ER No. TEC70012206

Director (CA), TEC

D (CA), TEC



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 Sl. No.
 Telecom Equipment/Product
 Test Parameter or Type of Testing
 Standard/Specification

 Optical Fibre (Single Mode)
 Zero
 for Optical Fibre (ITU-T G.657.A1)
 TEC ER No. TEC70012206

 Wavelength range
 Made
 for Optical Fibre (ITU-T G.657.B3)
 TEC ER No. TEC70012206

 Polarization
 for Optical Fibre (ITU-T G.657.B3)
 TEC ER No. TEC70012206

 Wavelength range
 for Optical Fibre (ITU-T G.657.B3)
 TEC ER No. TEC70012206

 Made
 For Optical Fibre (ITU-T G.652.D)
 TEC ER No. TEC70012206

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	Wavelength range	for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-42	TEC ER No. TEC70012206
	Polarization Mode	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-48, IEC 60793-2-50	TEC ER No. TEC70012206
	Dispersion for Uncabled Fiber	for Optical Fibre (ITU-T G.655) IEC 60793-1-48, IEC 60793-2-50	TEC ER No. TEC70012206
		for Optical Fibre(ITU-T G.656) IEC 60793-1-48, IEC 60793-2-50	TEC ER No. TEC70012206
		for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-48, IEC 60793-2-50	TEC ER No. TEC70012206
		for Optical Fibre (ITU-T G.657.A2) IEC 60793-1-48, IEC 60793-2-50	TEC ER No. TEC70012206
		for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-48, IEC 60793-2-50	TEC ER No. TEC70012206
	Cable Cut off Wavelength	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-44, IEC 60793-2-50	TEC ER No. TEC70012206

Director (CA), TEC

AD (CA), TEC



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Validity: 30/08/2022 to 29/08/2025

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AD (CA), TEC

Sl. Telecom No. Equipment/ Product		Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre (Single Mode)	Cable Cut off Wavelength	for Optical Fibre (ITU-T G.655) IEC 60793-1-44, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.656) IEC 60793-1-44, IEC 60793-2-50	TEC ER No. TEC70012206
		3	for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-44, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.A2) IEC 60793-1-44, IEC 60793-2-50	TEC ER No. TEC70012200
1			for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-44, IEC 60793-2-50	TEC ER No. TEC70012200
		Fibre Cutoff Wavelength for Fibre used in	for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-44	TEC ER No. TEC70012200
		Patch cords & Pig-tails	for Optical Fibre (ITU-T G.657.A2) IEC 60793-1-44	TEC ER No. TEC70012200
			for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-44	TEC ER No. TEC70012200

Director (CA), TEC



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Last Amended on: ____

SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Optical Fibre (Single Mode)	Fibre Macro bend loss (Change in	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-47, IEC 60793-2-50	TEC ER No. TEC70012206
		Attenuation When fibre is coiled with 100	for Optical Fibre (ITU-T G.655) IEC 60793-1-47, IEC 60793-2-50	TEC ER No. TEC70012206
		turns on 60 ±1.0 mm diameter mandrel)	for Optical Fibre(ITU-T G.656) IEC 60793-1-47, IEC 60793-2-50	TEC ER No. TEC70012206
		Fibre Macro bend loss (Change in	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-47, IEC 60793-2-50	TEC ER No. TEC70012206
		Attenuation When fibre is coiled with 1	for Optical Fibre (ITU-T G.655) IEC 60793-1-47, IEC 60793-2-50	TEC ER No. TEC70012206
		turn around 32 ± 0.5 mm diameter mandrel)	for Optical Fibre(ITU-T G.656) IEC 60793-1-47, IEC 60793-2-50	TEC ER No. TEC70012206

Director (CA), TEC

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SI. Telecom Test Parameter or Type of Testing Standard/ No. Equipment/ Specification Product **Optical Fibre** Fibre Macro for Optical Fibre (ITU-T G.652.D) TEC ER No. bend loss IEC 60793-1-47, IEC 60793-2-50 TEC70012206 (Single Mode) (Change in Attenuation When fibre is coiled with 100 turns on 50 ± 0.5 mm diameter mandrel) for Optical Fibre (ITU-T G.657.A1) Fibre Macro TEC ER No. bend loss IEC 60793-1-47, IEC 60793-2-50 TEC70012206 (Change in Attenuation When fibre is for Optical Fibre (ITU-T G.657.A2) TEC ER No. coiled with 10 IEC 60793-1-47, IEC 60793-2-50

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TEC70012206

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turns on 15 mm

radius mandrel)



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Optical Fibre (Single Mode)	Fibre Macro bend loss (Change in	for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-47, IEC 60793-2-50	TEC ER No. TEC70012206
		Attenuation When fibre is coiled with 1	for Optical Fibre (ITU-T G.657.A2) IEC 60793-1-47, IEC 60793-2-50	TEC ER No. TEC70012206
		turn on 10 mm radius mandrel)	for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-47, IEC 60793-2-50	TEC ER No. TEC70012206
		Fibre Macro bend loss (Change in Attenuation	for Optical Fibre (ITU-T G.657.A2) IEC 60793-1-47, IEC 60793-2-50	TEC ER No. TEC70012206
		When fibre is coiled with 1 turn on 7.5 mm radius mandrel)	for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-47, IEC 60793-2-50	TEC ER No. TEC70012206

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Validity: 30/08/2022 to 29/08/2025

Test Parameter or Type of Testing Telecom SI. Standard/ No. Equipment/ Specification Product **Optical Fibre** Fibre Macro for Optical Fibre (ITU-T G.657.B3) TEC ER No. bend loss IEC 60793-1-47, IEC 60793-2-50 TEC70012206 (Single Mode) (Change in Attenuation When fibre is coiled with 1 turn on 5 mm radius mandrel Peak for Optical Fibre (ITU-T G.652.D) TEC ER No. Stripability IEC 60793-1-32, IEC 60793-2-50 TEC70012206 Force to Remove for Optical Fibre (ITU-T G.655) TEC ER No. Primary IEC 60793-1-32, IEC 60793-2-50 TEC70012206 Coating of the fiber (Unaged, for Optical Fibre (ITU-T G.656) TEC ER No. Water aged, IEC 60793-1-32, IEC 60793-2-50 TEC70012206 **Damp Heat** aged) for Optical Fibre (ITU-T G.657.A1) TEC ER No. (i) 200 µm fibre TEC70012206 (ii) 250 um fibre IEC 60793-1-32, IEC 60793-2-50

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Sl. Telecom No. Equipment/ Product		Test Parameter o	or Type of Testing	Standard/ Specification
	Optical Fibre (Single Mode)	Peak Stripability Force to Remove Primary Coating of the	for Optical Fibre (ITU-T G.657.A2) (i) 200 μm fibre (ii) 250 μm fibre IEC 60793-1-32, IEC 60793-2-50	TEC ER No. TEC70012206
		fiber (Unaged, Water aged, Damp Heat aged)	for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-32, IEC 60793-2-50	TEC ER No. TEC70012206
		Fibre Curl	for Optical Fibre (ITU-T G.652.D) IEC 60793-1-34, IEC 60793-2-50	TEC ER No. TEC70012200
			for Optical Fibre (ITU-T G.655) IEC 60793-1-34, IEC 60793-2-50	TEC ER No. TEC70012200
			for Optical Fibre (ITU-T G.656) IEC 60793-1-34, IEC 60793-2-50	TEC ER No. TEC70012206
	_		for Optical Fibre (ITU-T G.657.A1) IEC 60793-1-34, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.A2) IEC 60793-1-34, IEC 60793-2-50	TEC ER No. TEC70012206
			for Optical Fibre (ITU-T G.657.B3) IEC 60793-1-34, IEC 60793-2-50	TEC ER No. TEC70012200

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SI. Telecom Test Parameter or Type of Testing Standard/ No. Equipment/ Specification Product 2. **Raw** material Mode Field Section-I, Type-I, Single Mode TEC GR No. Diameter Optical Fibre as per ITU-T G.652.D TEC89010:2021 for at 1310 nm Manufacturing IEC 60793-1-45 of Optical Section-I, Type-II, Single Mode TEC GR No. **Fibre Cable** Optical Fibre as per ITU-T G.655 at TEC89010:2021 1550 nm IEC 60793-1-45 Section-I, Type-III, Single Mode TEC GR No. Optical Fibre as per ITU-T G.656 at TEC89010:2021 1550 nm IEC 60793-1-45 Section-I, Type-IV, Single Mode TEC GR No. Optical Fibre as per ITU-T G.657.A1 TEC89010:2021 at 1310 nm IEC 60793-1-45

Section-I, Type-IV, Single Mode TEC GR No. Optical Fibre as per ITU-T G.657.A2 TEC89010:2021 at 1310 nm IEC 60793-1-45

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Raw material for Manufacturing	Mode Field Diameter	Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 at 1310 nm IEC 60793-1-45	TEC GR No. TEC89010:2021
	of Optical Fibre Cable	Cladding Diameter	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D at 1310 nm IEC 60793-1-45	TEC GR No. TEC89010:2021
			Section-I, Type-II, Single Mode Optical Fibre as per ITU-T G.655 at 1550 nm IEC 60793-1-45	TEC GR No. TEC89010:2021
			Section-I, Type-III, Single Mode Optical Fibre as per ITU-T G.656 at 1550 nm IEC 60793-1-45	TEC GR No. TEC89010:2021
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 at 1310 nm IEC 60793-1-45	TEC GR No. TEC89010:2021

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SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing of Optical	Cladding Diameter	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 at 1310 nm IEC 60793-1-45	TEC GR No. TEC89010:202
	Fibre Cable		Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 at 1310 nm IEC 60793-1-45	TEC GR No. TEC89010:202
		Cladding Non- Circularity	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D IEC 60793-1-20	TEC GR No. TEC89010:202
			Section-I, Type-II, Single Mode Optical Fibre as per ITU-T G.655 IEC 60793-1-20	TEC GR No. TEC89010:202
			Section-I, Type-III, Single Mode Optical Fibre as per ITU-T G.656 IEC 60793-1-20	TEC GR No. TEC89010:202
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 IEC 60793-1-20	TEC GR No. TEC89010:202

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 Sl. No.
 Telecom Equipment/ Product
 Test Parameter or Type of Testing
 Standard/ Specification

 Raw material for
 Cladding Non- Circularity
 Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2
 TEC GR No. TEC89010:2021

Ior Manufacturing	Circularity	IEC 60793-1-20	11203010.2021
of Optical Fibre Cable		Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 IEC 60793-1-20	TEC GR No. TEC89010:2021
	Core Clad Concentricity error	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D IEC 60793-1-20, IEC 60793-2-50	TEC GR No. TEC89010:2021
		Section-I, Type-II, Single Mode Optical Fibre as per ITU-T G.655 IEC 60793-1-20, IEC 60793-2-50	TEC GR No. TEC89010:2021
		Section-I, Type-III, Single Mode Optical Fibre as per ITU-T G.656 IEC 60793-1-20, IEC 60793-2-50	TEC GR No. TEC89010:2021
		Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 IEC 60793-1-20, IEC 60793-2-50	TEC GR No. TEC89010:2021

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SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing of Optical	Core Clad Concentricity error	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 IEC 60793-1-20, IEC 60793-2-50	TEC GR No. TEC89010:2021
	of Optical Fibre Cable		Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 IEC 60793-1-20, IEC 60793-2-50	TEC GR No. TEC89010:202
		Coating/ Cladding Concentricity	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D IEC 60793-1-21, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-II, Single Mode Optical Fibre as per ITU-T G.655 IEC 60793-1-20, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-III, Single Mode Optical Fibre as per ITU-T G.656 IEC 60793-1-20, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 (i) 250 μm fibre (ii) 200 μm fibre IEC 60793-1-20, IEC 60793-2-50	TEC GR No. TEC89010:202

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing of Optical Fibre Cable	Coating/ Cladding Concentricity	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 (i) 250 μm fibre (ii) 200 μm fibre IEC 60793-1-20, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 IEC 60793-1-20, IEC 60793-2-50	TEC GR No. TEC89010:202
		Coating Diameter	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D IEC 60793-1-21, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-II, Single Mode Optical Fibre as per ITU-T G.655 IEC 60793-1-21, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-III, Single Mode Optical Fibre as per ITU-T G.656 IEC 60793-1-21, IEC 60793-2-50	TEC GR No. TEC89010:202

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SI. No.	Telecom Equipment/ Product	Test Paramet	er or Type of Testing	Standard/ Specification TEC GR No. TEC89010:2021
	Raw material for Manufacturing of Optical Fibre Cable	Coating Diameter	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 (i) 250 μm fibre (ii) 200 μm fibre IEC 60793-1-21, IEC 60793-2-50	The second s
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 (i) 250 µm fibre (ii) 200 µm fibre IEC 60793-1-21, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 IEC 60793-1-21, IEC 60793-2-50	TEC GR No. TEC89010:202

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Sl. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing of Optical Fibre Cable	Fibre Attenuation before Cabling	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D (i) at 1310 nm (ii between 1285-1380 nm (iii) between 1390-1525 nm (iv) at 1550 nm (v) between 1525-1625 nm (vi) at 1270 nm (vii) at 1490 nm (viii) at 1625 nm (ix) water peak attenuation at 1380 to 1390 nm IEC 60793-1-40	TEC GR No. TEC89010:202
			Section-I, Type-II, Single Mode Optical Fibre as per ITU-T G.655 (i) between 1525 - 1565 nm (ii between 1565 - 1625 nm (iii) at 1550 nm (iv) at 1625 nm IEC 60793-1-40	TEC GR No. TEC89010:202

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SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing of Optical Fibre Cable	Fibre Attenuation before Cabling	Section-I, Type-III, Single Mode Optical Fibre as per ITU-T G.656 (i) between 1460-1525 nm (ii) between 1525-1565 nm (iii) between 1565-1625 nm (iv) at 1550 nm (v) at 1625 nm IEC 60793-1-40	TEC GR No. TEC89010:202
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 (i) at 1270 nm (ii) at 1310 nm (iii) between 1285 -1360 nm (iv) between 1360 -1480 nm (v) at 1490 nm (vi) between 1480 to 1525 nm (vii) at 1550 nm (viii) between 1525 to 1625 nm (ix) at 1625 nm IEC 60793-1-40	TEC GR No. TEC89010:202

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SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing of Optical Fibre Cable	Fibre Attenuation before Cabling	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 (i) at 1270 nm (ii) at 1310 nm (iii) between 1285 -1360 nm (iv) between 1306-1480 nm (v) at 1490 nm (vi) between 1480-1525 nm (vii) between 1480-1525 nm (viii) between 1525-1625 nm (ix) at 1625 nm IEC 60793-1-40	TEC GR No. TEC89010:202
			Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 (i) at 1310 nm (ii) between 1285 -1360 nm (iii) between 1360 -1525 nm (iv) at 1550 nm (v) between 1525 to 1625 nm (vi) at 1270 nm (vii) at 1490 nm (viii) at 1625 nm, IEC 60793-1-40	TEC GR No. TEC89010:202

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SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification	
	Raw material for Manufacturing of Optical Fibre Cable	Fibre Attenuation after Cabling	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D (i) at 1310 nm (ii) at 1550 nm (iii) at 1625 nm (iv) at 1490 nm (v) water peak attenuation at 1383nm ± 3nm IEC 60793-1-40	TEC GR No. TEC89010:202	
			Section-I, Type-II, Single Mode Optical Fibre as per ITU-T G.655 (i) at 1550 nm (ii) at 1625 nm IEC 60793-1-40	TEC GR No. TEC89010:202	
			Section-I, Type-III, Single Mode Optical Fibre as per ITU-T G.656 (i) at 1440 nm (ii) at 1550 nm (iii) at 1625 nm (iv) water peak attenuation at 1383nm ± 3nm IEC 60793-1-40	TEC GR No. TEC89010:202	

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Telecom

No. Equipment/

SI.

Test Parameter or Type of Testing Standard/

Product			Specification
Raw material for Manufacturing of Optical Fibre Cable	Fibre Attenuation after Cabling	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 (i) at 1310 nm (ii) at 1383 nm (iii) at 1490 nm (iv) at 1550 nm (v) at 1625 nm IEC 60793-1-40	TEC GR No. TEC89010:202
		Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 (i) at 1310 nm (ii) at 1383 nm (iii) at 1490 nm (iv) at 1550 nm (v) at 1625 nm IEC 60793-1-40	TEC GR No. TEC89010:2021

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SI. No.	Telecom Equipment/ Product Raw material for Manufacturing of Optical Fibre Cable	Test Parameter or Type of Testing		Standard/ Specification
		Fibre Attenuation after Cabling	Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 (i) at 1310 nm (ii) at 1383 nm (iii) at 1490 nm (iv) at 1550 nm (v) at 1625 nm IEC 60793-1-40	TEC GR No. TEC89010:202
		Cable Cut off Wavelength	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D IEC 60793-1-44, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-II, Single Mode Optical Fibre as per ITU-T G.655 IEC 60793-1-44, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-III, Single Mode Optical Fibre as per ITU-T G.656 IEC 60793-1-44, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 IEC 60793-1-44, IEC 60793-2-50	TEC GR No. TEC89010:202

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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Validity: 30/08/2022 to 29/08/2025

SI. Telecom Test Parameter or Type of Testing Standard/ No. Equipment/ Specification Product Raw material Cable Cut off Section-I, Type-IV, Single Mode TEC GR No. Wavelength Optical Fibre as per ITU-T G.657.A2 TEC89010:2021 for IEC 60793-1-44, IEC 60793-2-50 Manufacturing Section-I, Type-V, Single Mode TEC GR No. of Optical Optical Fibre as per ITU-T G.657.B3 TEC89010:2021 Fibre Cable IEC 60793-1-44, IEC 60793-2-50 Fibre Cutoff Section-I, Type-IV, Single Mode TEC GR No. Wavelength for Optical Fibre as per ITU-T G.657.A1 TEC89010:2021 Fibre used in IEC 60793-1-44 Patch cords & Section-I, Type-IV, Single Mode TEC GR No. **Pig-tails** Optical Fibre as per ITU-T G.657.A2 TEC89010:2021 IEC 60793-1-44 Section-I, Type-V, Single Mode TEC GR No. Optical Fibre as per ITU-T G.657.B3 TEC89010:2021 IEC 60793-1-44 Fibre Curl Section-I, Type-I, Single Mode TEC GR No. Optical Fibre as per ITU-T G.652.D TEC89010:2021 IEC 60793-1-34, IEC 60793-2-50 Section-I, Type-II, Single Mode TEC GR No. Optical Fibre as per ITU-T G.655 TEC89010:2021 IEC 60793-1-34, IEC 60793-2-50

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification TEC GR No. TEC89010:2021
Raw material for Manufacturing	Fibre Curl	Section-I, Type-III, Single Mode Optical Fibre as per ITU-T G.656 IEC 60793-1-34, IEC 60793-2-50		
	of Optical Fibre Cable		Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 IEC 60793-1-34, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 IEC 60793-1-34, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 IEC 60793-1-34, IEC 60793-2-50	TEC GR No. TEC89010:202
	bend loss (Change in Attenuation When fibre is coiled with 100 turns on 60 ±1.0 mm diameter	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D IEC 60793-1-47, IEC 60793-2-50	TEC GR No. TEC89010:202	

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Validity: 30/08/2022 to 29/08/2025

SI. Telecom Test Parameter or Type of Testing Standard/ No. Equipment/ Specification Product Raw material Fibre Macro Section-I, Type-II, Single Mode TEC GR No. bend loss Optical Fibre as per ITU-T G.655 TEC89010:2021 for (Change in IEC 60793-1-47, IEC 60793-2-50 Manufacturing Attenuation of Optical When fibre is Section-I, Type-III, Single Mode TEC GR No. Fibre Cable coiled with 100 Optical Fibre as per ITU-T G.656 TEC89010:2021 turns on 60 IEC 60793-1-47, IEC 60793-2-50 ±1.0 mm diameter mandrel) **Fibre Macro** Section-I, Type-I, Single Mode TEC GR No. bend loss Optical Fibre as per ITU-T G.652.D TEC89010:2021 IEC 60793-1-47, IEC 60793-2-50 (Change in Attenuation Section-I, Type-II, Single Mode TEC GR No. When fibre is Optical Fibre as per ITU-T G.655 TEC89010:2021 coiled with 1 IEC 60793-1-47, IEC 60793-2-50 turn around Section-I, Type-III, Single Mode TEC GR No. $32 \pm 0.5 \text{ mm}$ Optical Fibre as per ITU-T G.656 TEC89010:2021 diameter IEC 60793-1-47, IEC 60793-2-50 mandrel)

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Telecom **Test Parameter or Type of Testing** Standard/ SI. No. Equipment/ Specification Product Row motorial Fibre Macro Section-I Type-I Single Mode TEC GR No.

Kaw material for Manufacturing of Optical Fibre Cable	hibre Macro bend loss (Change in Attenuation When fibre is coiled with 100 turns on 50 ±0.5 mm diameter mandrel)	Optical Fibre as per ITU-T G.652.D IEC 60793-1-47, IEC 60793-2-50	TEC89010:2021
	Fibre Macro bend loss (Change in Attenuation When fibre is	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 IEC 60793-1-47, IEC 60793-2-50	TEC GR No. TEC89010:2021
	coiled with 10 turns on 15 mm radius mandrel)	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 IEC 60793-1-47, IEC 60793-2-50	TEC GR No. TEC89010:2021

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Telecom Test Parameter or Type of Testing Standard/ SI. Specification No. Equipment/ Product Section-I, Type-IV, Single Mode TEC GR No. Raw material Fibre Macro TEC89010:2021 bend loss Optical Fibre as per ITU-T G.657.A1 for (Change in IEC 60793-1-47, IEC 60793-2-50 Manufacturing Attenuation Section-I, Type-IV, Single Mode of Optical TEC GR No. When fibre is TEC89010:2021 **Fibre Cable** Optical Fibre as per ITU-T G.657.A2 coiled with 1 IEC 60793-1-47, IEC 60793-2-50 turn on 10 mm Section-I, Type-V, Single Mode TEC GR No. radius mandrel Optical Fibre as per ITU-T G.657.B3 TEC89010:2021 IEC 60793-1-47, IEC 60793-2-50 Fibre Macro Section-I, Type-IV, Single Mode TEC GR No. bend loss TEC89010:2021 Optical Fibre as per ITU-T G.657.A2 (Change in IEC 60793-1-47, IEC 60793-2-50 Attenuation When fibre is Section-I, Type-V, Single Mode TEC GR No. coiled with 1 Optical Fibre as per ITU-T G.657.B3 TEC89010:2021 turn on IEC 60793-1-47, IEC 60793-2-50 7.5 mm radius mandrel

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. Telecom Test Parameter or Type of Testing Standard/ No. Equipment/ Specification Product Fibre Macro Raw material Section-I, Type-V, Single Mode TEC GR No. bend loss Optical Fibre as per ITU-T G.657.B3 TEC89010:2021 for IEC 60793-1-47, IEC 60793-2-50 (Change in Manufacturing Attenuation of Optical When fibre is Fibre Cable coiled with 1 turn on 5 mm radius mandrel Polarization Section-I, Type-I, Single Mode TEC GR No. Mode Optical Fibre as per ITU-T G.652.D TEC89010:2021 IEC 60793-1-48, IEC 60793-2-50 **Dispersion** for Section-I, Type-II, Single Mode **Uncabled** Fiber TEC GR No. Optical Fibre as per ITU-T G.655 TEC89010:2021 IEC 60793-1-48, IEC 60793-2-50 Section-I, Type-III, Single Mode TEC GR No. Optical Fibre as per ITU-T G.656 TEC89010:2021 IEC 60793-1-48, IEC 60793-2-50 Section-I, Type-IV, Single Mode TEC GR No. Optical Fibre as per ITU-T G.657.A1 TEC89010:2021

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IEC 60793-1-48, IEC 60793-2-50

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter o	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing	Polarization Mode Dispersion for	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 IEC 60793-1-48, IEC 60793-2-50	TEC GR No. TEC89010:2021
	of Optical Fibre Cable	Uncabled Fiber	Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 IEC 60793-1-48, IEC 60793-2-50	TEC GR No. TEC89010:2021
		Polarization Mode Dispersion for Cabled Fiber	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D IEC 60793-1-48, IEC 60793-2-50	TEC GR No. TEC89010:2021
			Section-I, Type-II, Single Mode Optical Fibre as per ITU-T G.655 IEC 60793-1-48, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-III, Single Mode Optical Fibre as per ITU-T G.656 IEC 60793-1-48, IEC 60793-2-50	TEC GR No. TEC89010:2021
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 IEC 60793-1-48, IEC 60793-2-50	TEC GR No. TEC89010:2021

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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SI. No.	Telecom Equipment/ Product	Test Parameter o	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing	Polarization Mode Dispersion	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 IEC 60793-1-48, IEC 60793-2-50	TEC GR No. TEC89010:202
	of Optical Fibre Cable	for Cabled Fiber	Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 IEC 60793-1-48, IEC 60793-2-50	TEC GR No. TEC89010:202
		Zero Dispersion Slope	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D IEC 60793-1-42	TEC GR No. TEC89010:202
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 IEC 60793-1-42	TEC GR No. TEC89010:202
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 IEC 60793-1-42	TEC GR No. TEC89010:202
			Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 IEC 60793-1-42	TEC GR No. TEC89010:202

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter o	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing	Zero Dispersion Wavelength range	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D IEC 60793-1-42	TEC GR No. TEC89010:202
	of Optical Fibre Cable	_	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 IEC 60793-1-42	TEC GR No. TEC89010:202
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 IEC 60793-1-42	TEC GR No. TEC89010:202
			Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 IEC 60793-1-42	TEC GR No. TEC89010:202
		Peak Stripability Force to Remove	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D IEC 60793-1-32, IEC 60793-2-50	TEC GR No. TEC89010:202
		Primary Coating of the fiber (Unaged,	Section-I, Type-II, Single Mode Optical Fibre as per ITU-T G.655 IEC 60793-1-32, IEC 60793-2-50	TEC GR No. TEC89010:202
		Water aged, Damp Heat aged)	Section-I, Type-III, Single Mode Optical Fibre as per ITU-T G.656 IEC 60793-1-32, IEC 60793-2-50	TEC GR No. TEC89010:2021

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter o	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing of Optical	Peak Stripability Force to Remove Primary Coating of the	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 (i) 250 µm fibre (ii) 200 µm fibre IEC 60793-1-32, IEC 60793-2-50	TEC GR No. TEC89010:202
	Fibre Cable	fiber (Unaged, Water aged, Damp Heat aged)	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 (i) 250 μm fibre (ii) 200 μm fibre IEC 60793-1-32, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 IEC 60793-1-32, IEC 60793-2-50	TEC GR No. TEC89010:202
		Total Dispersion (Chromatic Dispersion)	Section-I, Type-I, Single Mode Optical Fibre as per ITU-T G.652.D i) In 1285-1330 nm band ii) In 1270-1340 nm band iii) at 1550 nm iv) at 1625 nm IEC 60793-1-42, IEC 60793-2-50	TEC GR No. TEC89010:202

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SI. No.	Telecom Equipment/ Product	Test Paramete	r or Type of Testing	Standard/ Specification
	Raw material for Manufacturing of Optical Fibre Cable	Total Dispersion (Chromatic Dispersion)	Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A1 i) In 1285-1330 nm band ii) In 1270-1340 nm band iii) at 1550 nm iv) at 1625 nm IEC 60793-1-42, IEC 60793-2-50	TEC GR No. TEC89010:2021
			Section-I, Type-IV, Single Mode Optical Fibre as per ITU-T G.657.A2 i) In 1285-1330 nm band ii) In 1270-1340 nm band iii) at 1550 nm iv) at 1625 nm IEC 60793-1-42, IEC 60793-2-50	TEC GR No. TEC89010:202
			Section-I, Type-V, Single Mode Optical Fibre as per ITU-T G.657.B3 i) In 1285-1330 nm band ii) In 1270-1340 nm band iii) at 1550 nm iv) at 1625 nm IEC 60793-1-42, IEC 60793-2-50	TEC GR No. TEC89010:202

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SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing	Section-II Central Strength	Thermal Resistance Test as per TEC 89010:2021	TEC GR No. TEC89010:2021
	of Optical Fibre Cable	Member Fibre reinforced Plastic rod (FRP)	Elongation at Break as per ASTM D3916	TEC GR No. TEC89010:2021
			Heat Stress Test as per TEC 89010:2021	TEC GR No. TEC89010:2021
			Minimum Bend Diameter as per TEC 89010:2021	TEC GR No. TEC89010:2021
			Tensile Strength at break as per ASTM D3916	TEC GR No. TEC89010:2021
			Water Absorption as per ASTM D 570	TEC GR No. TEC89010:2021

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Product
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 Specification

Raw material for	Section- III [Generic	Carbon Black content as per ASTM D1603	TEC GR No. TEC89010:2021
Manufacturing of Optical Fibra Cable	Requirements of Sheath Material	Environmental Stress Cracking Resistance (ESCR) as per ASTM D1693	TEC GR No. TEC89010:2021
FIDTe Cable	HDPE	Carbon black dispersion as per IS-7328	TEC GR No. TEC89010:2021
	(BLACK)]	Oxidation Induction Time as per ASTM D3895	TEC GR No. TEC89010:2021
		Density Test as per ASTM D792	TEC GR No. TEC89010:2021
		Elongation at Break as per ASTM D638	TEC GR No. TEC89010:2021
		Melt Flow Rate (Melt Flow Index) as per ASTM D1238	TEC GR No. TEC89010:2021
		Moisture (content) Test as per ASTM D817	TEC GR No. TEC89010:2021
		Tensile Strength Test as per ASTM D638	TEC GR No. TEC89010:2021
	for Manufacturing	for Manufacturing of Optical Fibre Cable	for Manufacturing of Optical Fibre Cable[Generic Requirements of Sheath Material (Polyethylene HDPE (BLACK)]ASTM D1603Fibre Cable[Generic Requirements of Sheath Material (Polyethylene HDPE (BLACK)]Environmental Stress Cracking Resistance (ESCR) as per ASTM D1693Carbon black dispersion as per IS-7328Carbon black dispersion as per IS-7328Oxidation Induction Time as per ASTM D3895Density Test as per ASTM D792Elongation at Break as per ASTM D638Melt Flow Rate (Melt Flow Index) as per ASTM D1238Moisture (content) Test as per ASTM D817Tensile Strength Test as per

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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 Fest Parameter or Type of Testing
 Specification

 Raw material
 Section- III
 UV Resistance Test as per
 TEC GR No.

 for
 [Generic
 IEC 60794-1-22, ASTM 154
 TEC89010:2021

 Manufacturing
 Requirements
 Fertility
 TEC89010:2021

for Manufacturing of Optical Fibre Cable	[Generic Requirements of Sheath Material (Polyethylene HDPE (BLACK)]	IEC 60794-1-22, ASTM 154	TEC89010:2021
	Section- IV [Generic	Density Test as per ASTM D792	TEC GR No. TEC89010:2021
	Requirements of Outer JACKET Material	Melt Flow Rate (Melt Flow Index) as per ASTM D1238	TEC GR No. TEC89010:2021
	(Polyamide-12)]	Elongation as per ASTM D638	TEC GR No. TEC89010:2021
		Tensile Strength Test as per ASTM D638	TEC GR No. TEC89010:2021
		Water Absorption as per ASTM D 570	TEC GR No. TEC89010:2021
		Hardness as per ASTM D 2240	TEC GR No. TEC89010:2021

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 Product
 Specification

Raw material for Manufacturing of Optical Fibre Cable	Section- IV [Generic Requirements of Outer JACKET Material (Polyamide-12)]	Nos & Colour identification of Fiber per unit/tube/cable as per Munsell TIA 598	TEC GR No. TEC89010:2021
	Section- V [Generic	Density Test as per ASTM D792	TEC GR No. TEC89010:2021
	Requirements of Outer JACKET	Melt Flow Rate (Melt Flow Index) as per ASTM D1238	TEC GR No. TEC89010:2021
	Material Polyamide –11]	Elongation test as per ASTM D638	TEC GR No. TEC89010:2021
		Tensile Strength Test as per ASTM D638	TEC GR No. TEC89010:2021
		Water Absorption as per ASTM D 570	TEC GR No. TEC89010:2021
		Hardness as per ASTM D 2240	TEC GR No. TEC89010:2021
		Nos & Colour identification of Fiber per unit/tube/cable as per Munsell TIA 598	TEC GR No. TEC89010:2021

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Laboratory Name:

: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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SI. No.	Telecom Equipment/ Product	Test Parameter o	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing	Section- VI- 1 Generic Requirements of	Melt Flow Rate (Melt Flow Index) as per ASTM D1238	TEC GR No. TEC89010:202
	of Optical Fibre Cable	Polypropylene Material	Elongation Test as per ASTM D638	TEC GR No. TEC89010:202
			Tensile Strength Test as per ASTM D638	TEC GR No. TEC89010:202
		Section- VI- 2 Generic Requirements of Polybutylene	Melt Flow Rate (Melt Flow Index) as per ASTM D1238	TEC GR No. TEC89010:202
	25	Terephthalate (PBTP) Material	Elongation Test as per ASTM D638	TEC GR No. TEC89010:202
			Tensile Strength Test as per ASTM D638	TEC GR No. TEC89010:202
			Water Absorption as per ASTM D 570	TEC GR No. TEC89010:202

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Test Parameter or Type of Testing SI. Telecom Standard/ No. Equipment/ Specification Product Cone Penetration at 25°C as per TEC GR No. Raw material Section- VII. Type-1, ASTM D217 TEC89010:2021 for Type-2 Manufacturing [Generic Cone Penetration at -30 °C as per TEC GR No. of Optical Requirements ASTM D217 TEC89010:2021 Fibre Cable of FILLING COMPOUND Density Test as per TEC GR No. for LOOSE **ASTM D1217** TEC89010:2021 TUBE (For Temperature Drop point as per TEC GR No. Range of -30°C **ASTM 566** TEC89010:2021 to + 80°C & For Temperature Flash point as per TEC GR No. Range of -40°C ASTM D92 TEC89010:2021 to + 80°C)] Filling Jelly Compatibility with Fiber TEC GR No. coating, UV Ink & Tube Material as TEC89010:2021 per **ASTM D4568**

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SI. No.	Telecom Equipment/ Product	Test Parameter of	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing	Section- VIII, Type- 1, Type- 2 [Generic	Cone Penetration at 25°C as per ASTM D217	TEC GR No. TEC89010:2021
	of Optical Fibre Cable	Requirements of Cable Flooding	Cone Penetration at -30 °C as per ASTM D217	TEC GR No. TEC89010:202
		Compound (For Temperature Range of	Density test as per ASTM D1217	TEC GR No. TEC89010:2021
		-30°C to +80°C & For Temperature	Drop point as per ASTM 566	TEC GR No. TEC89010:202
		Range of -40°C to + 80°C]	Flash point as per ASTM D92	TEC GR No. TEC89010:202
			Filling Jelly Compatibility with Fiber coating, UV Ink & Tube Material as per ASTM D4568	TEC GR No. TEC89010:202

TEC Director



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Standard/ **Test Parameter or Type of Testing** SI. Telecom Specification No. Equipment/ Product Tensile (breaking load) & Belt TEC GR No. Raw material Section-IX, Strength as per TEC89010:2021 Type-1, Type-2 for ASTM D882 [Generic Manufacturing **Requirements** of of Optical **Binder Tape and** Fibre Cable TEC GR No. NYLON/ Elongation Test as per TEC89010:2021 POLYESTER ASTM D882 **Binder Thread** (PP & Nylon/ Polyester)]

Foil/Tape Elongation test as per TEC GR	t No. 10:2021	Section- X Generic Requirements of Polyester
(Natural)] ASTM D882 TEC890	R No. 10:2021	Foil/Tape (Natural)]

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Telecom Equipment/	Test Parameter or Type of Testing	Standard/ Specification
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Raw material for	Section- XI [Generic	Elongation as per ASTM D3916	TEC GR No. TEC89010:2021
Manufacturing of Optical	Requirements of Impregnated	Minimum Bend Diameter as per TEC GR No. TEC89010:2021	TEC GR No. TEC89010:2021
Fibre Cable	Semi Rigid Fibre Reinforced	Tensile Strength Test as per ASTM D3916	TEC GR No. TEC89010:2021
	Plastic ROD]	Water Absorption as per ASTM D 570	TEC GR No. TEC89010:2021
	Section- XII [Generic Requirements of Impregnated Glass Fibre Reinforced]	Water Absorption as per ASTM D 570	TEC GR No. TEC89010:2021
	Section- XIV [Generic Requirements of Water BLOCKING Tape]	Swelling Speed as per As per TEC GR No. 89010:2021	TEC GR No. TEC89010:2021
		Swelling Height as per As per TEC GR No. 89010:2021	TEC GR No. TEC89010:2021

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Test Parameter or Type of Testing Standard/ SI. Telecom No. Equipment/ Specification Product Raw material Section- XVI Elongation at Break as per TEC GR No. ASTM D3916 TEC89010:2021 Generic for Requirements Manufacturing of Aramid Heat Stress Test as per TEC GR No. of Optical Reinforced TEC GR No. 89010:2021 TEC89010:2021 Fibre Cable PLASTIC (ARP) ROD] Minimum Bend Diameter as per TEC GR No. TEC GR No. 89010:2021 TEC89010:2021 Tensile Strength at break as per TEC GR No. ASTM D3916 TEC89010:2021 Section-XVIII Gram per Denier (GPD) TEC GR No. Generic TEC89010:2021 ASTM D2256/ D2256M Requirements of Breaking Load as per TEC GR No. POLYESTER ASTM D2256/ D2256M TEC89010:2021 **RIP CORD** Elongation at Break as per TEC GR No. ASTM D2256/ D2256M TEC89010:2021

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification	
	Raw material for Manufacturing	Section- XIX [Generic Requirements	Breaking Load as per ASTM D2256/ D2256M	TEC GR No. TEC89010:2021	
	of Optical Fibre Cable	of Water Swellable (WS) YARN]	Elongation at Break as per ASTM D2256/ D2256M	TEC GR No. TEC89010:2021	
			Swelling Capacity as per TEC GR No. 89010:2021	TEC GR No. TEC89010:2021	
			Swelling Speed as per TEC GR No. 89010:2021	TEC GR No. TEC89010:2021	
		Section- XX [Generic Requirements	Environmental Stress Cracking Resistance (ESCR) as per ASTM D1693	TEC GR No. TEC89010:2021	
		of LSZH Material	Elongation at Break as per ASTM D638	TEC GR No. TEC89010:2021	
		(for Sheathing]	Tensile Strength as per ASTM D638	TEC GR No. TEC89010:2021	
			Hardness as per ASTM D2240	TEC GR No. TEC89010:2021	

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Raw material for	Section- XXI (Generic	Carbon black content as per ASTM D1603	TEC GR No. TEC89010:2021
Manufacturing of Optical Fibre Cable	Requirements of Anti Tracking Polyethylene for	Environmental Stress Cracking Resistance (ESCR) as per ASTM D1693	TEC GR No. TEC89010:2021
ribre Cable	ADSS OPTICAL	Carbon black dispersion as per IS-7328	TEC GR No. TEC89010:2021
	FIBRE CABLE)	Oxidation Induction Time as per ASTM D3895	TEC GR No. TEC89010:2021
		Density Test as per ASTM D792	TEC GR No. TEC89010:2021
		Elongation as per ASTM D638	TEC GR No. TEC89010:2021
		Moisture (Content) Test as per ASTM D1238	TEC GR No. TEC89010:2021
		Tensile Strength as per ASTM D638	TEC GR No. TEC89010:2021
		UV Resistance Test as per IEC 60794-1-22, ASTM G-154	TEC GR No. TEC89010:2021

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Product
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 Standard/
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	Raw material for Manufacturing of Optical Fibre Cable	Section- XXI (Generic Requirements of Anti Tracking Polyethylene for ADSS OPTICAL FIBRE CABLE)	Tracking & Erosion Test (For Track Resistance) as per IEC60794-4-20, ASTM D 2303	TEC GR No. TEC89010:2021
		Section- XXII [Generic Requirements of Specification for FILLING JELLY for OPGW CABLE]	Cone Penetration at 25°C as per ASTM D217	TEC GR No. TEC89010:2021
			Cone Penetration at -30 °C as per ASTM D217	TEC GR No. TEC89010:2021
			Density as per ASTM D1217	TEC GR No. TEC89010:2021
			Drop point as per ASTM 566	TEC GR No. TEC89010:2021
			Flash point as per ASTM D92	TEC GR No. TEC89010:2021
			Oil separation as per FTM 791-321	TEC GR No. TEC89010:2021

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Product
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Specification

 Raw material
 Section- XXII
 Volatility loss as per
 TEC GR No.

Raw material for Monufacturing	Section- XXII [Generic Requirements	Volatility loss as per FTM 791-321	TEC GR No. TEC89010:2021
of Optical Fibre Cable GOPGW CABLE]	of Specification for FILLING JELLY for OPGW	Filling Jelly Compatibility with Fiber coating, UV Ink & Tube Material as per ASTM D4568	TEC GR No. TEC89010:2021
	Section- XXVII [Generic	Density Test as per ASTM D792	TEC GR No. TEC89010:2021
	Requirements of Polyamide 12 / Polyamide 11 for TIGHT BUFFER]	Melt Flow Rate as per ASTM D1238	TEC GR No. TEC89010:2021
		Elongation as per ASTM D638	TEC GR No. TEC89010:2021
		Tensile Strength as per ASTM D792	TEC GR No. TEC89010:2021
		Melting Point as per ASTM D3418	TEC GR No. TEC89010:2021
		Water Absorption as per ASTM D570	TEC GR No. TEC89010:2021

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SI. No.	Telecom Equipment/ Product	Test Parameter o	or Type of Testing	Standard/ Specification
	Raw material for Manufacturing of Optical Fibre Cable	Section- XXVII [Generic Requirements of Polyamide 12 / Polyamide 11 for TIGHT BUFFER]	Hardness as per ASTM D2240	TEC GR No. TEC89010:2021
		Section- XXVIII [Generic	Density Test as per ASTM D792	TEC GR No. TEC89010:2021
		Requirements of Polyamide 10,	Melt Flow Rate as per ASTM D1238	TEC GR No. TEC89010:2021
		for OUTER JACKET Material]	Elongation as per ASTM D638	TEC GR No. TEC89010:202
			Tensile Strength as per ASTM D638	TEC GR No. TEC89010:202
			Water Absorption as per ASTM D570	TEC GR No. TEC89010:202
			Hardness as per ASTM D2240	TEC GR No. TEC89010:202
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- funition AD (CA), TEC

Director (CA), TEC



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 Raw material
 Section- XXVIII
 Colour (Nos & Colour identification
 TEC GR No

Raw material for Manufacturing of Optical Fibre Cable	Section- XXVIII [Generic Requirements of Polyamide 10, for OUTER JACKET Material]	Colour (Nos & Colour identification of Fiber per unit/tube/cable as per Munsell TIA 598	TEC GR No. TEC89010:2021
	Section- XXIX [Generic	Density Test as per ASTM D792	TEC GR No. TEC89010:2021
	Requirements of Thermoplastic Polyurethane (TPU) for OUTER JACKET Material]	Melt Flow Rate as per ASTM D1238	TEC GR No. TEC89010:2021
		Water Absorption as per ASTM D570	TEC GR No. TEC89010:2021
		Hardness as per ASTM D2240	TEC GR No. TEC89010:2021
		Colour (Nos & Colour identification of Fiber per unit/tube/cable as per Munsell TIA 598	TEC GR No. TEC89010:2021

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Test Parameter or Type of Testing Standard/ SI. Telecom No. Equipment/ Specification -Product 3 Variant-1: Attenuation as per IEC-60793-1-40 TEC ER No. **Optical Fibre** (i) at 1310nm TEC70022110 Cable Hybrid Cable -(ii) at 1383nm **Optical** and (iii) at 1490 nm Metallic (iv) at 1550nm (v) at 1625nm PMD as per IEC 60793-1-48 TEC ER No. (a) Cabled Loose Fibre TEC70022110 (b) Cabled Ribbon Fibre Cable Cut-off wavelength as per TEC ER No. IEC 60793-1-44 TEC70022110 Tensile Strength as per TEC ER No. IEC 60793-1-21 TEC70022110 Crush Resistance as per TEC ER No. IEC 60793-1-21 TEC70022110 TEC ER No. Impact Test as per IEC 60793-1-21 TEC70022110 Kink Test as per TEC ER No. IEC 60794-1-21 TEC70022110

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-1: Hybrid Cable -	Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Optical and Metallic	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Cable drip Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		1.1.1	Temperature Cycling as per IEC 60794-1-22	TEC ER No. TEC70022110
			Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
	a - 15		Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			UV Radiation Test as per IEC 60794-1-22	TEC ER No. TEC70022110

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Optical Fibre Cable	Variant-1: Hybrid Cable - Optical and	Check of the effect of aggression media on the cable as per ISO 175	TEC ER No. TEC70022110
	Metallic	Cable Material Compatibility as per Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110
		Electrical Continuity Test as per IEC 60794-1-24, IEC 60794- 3-11	TEC ER No. TEC70022110
		Kink Resistance Test as per IEC 60794-1-23	TEC ER No. TEC70022110
		Drainage Test/Compound Flow as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
		Water tightness /Water Blocking test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Strippability Test -Tight Buffer as per IEC 60794-3, IEC 60793-1-32, IEC 60793-1-32:2010	TEC ER No. TEC70022110
		Ribbon Dimension as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110

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Sl. Telecom No. Equipment/ Product		Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-1: Hybrid Cable - Optical and	Separability of individual fibres from ribbon as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
	1	Metallic	Ribbon Compression Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Torsion Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Micro-bend Test as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Stripability Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
			Mode Field Diameter at 1310 nm/1550nm as per IEC60793-1-45	TEC ER No. TEC70022110
			Cladding Diameter as per IEC 60793-1-20	TEC ER No. TEC70022110
			Cladding Non-Circularity as per IEC 60793-1-20	TEC ER No. TEC70022110
			Core Clad concentricity error as per IEC 60793-1-20	TEC ER No. TEC70022110

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Sl. Telecom No. Equipment/ Product		Test Parameter	Test Parameter or Type of Testing	
1	Optical Fibre Cable	Variant-1: Hybrid Cable -	Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
		Optical and Metallic	Coating/Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
			Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110
			Zero Dispersion Slope as per IEC 60793-1-42	TEC ER No. TEC70022110
			Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-1: Hybrid Cable - Optical and Metallic	 Fibre Macro bend loss as per ITU- T G.65x, ITU-T G.650.1, IEC 60793-2-50 and IEC 60793-1-47: (i) Change in attenuation when fiber is coiled with 100 turns on 60 ±1.0 mm diameter mandrel (ii) Change in attenuation when fiber is coiled with1 turn around 32 ± 0.5 mm diameter mandrel (iii) Change in attenuation when fiber is coiled with 100 turns on 50 ±0.5 mm diameter mandrel (iv) Change in attenuation when fibre is coiled with10 turns on 15 mm radius mandrel (v) Change in attenuation when fibre is coiled with 1 turn on 10 mm radius mandrel 	

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AD (CA), TEC



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SCOPE OF DESIGNATION (ANNEXURE)

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SL.	Telecom	Test Parameter or Type of Testing	Standard/
NO.	Equipment/		Specification
	Product		

		(vi) Change in attenuation when fibre is coiled with1 turn on 7.5 mm radius mandrel(vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel	
Optical Fibre Cable	Variant-1: Hybrid Cable - Optical and Metallic	Peak Stripability force to remove Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32	TEC ER No. TEC70022110
		Fiber Curl as per IEC 60793-2-50, IEC 60793-1-34	TEC ER No. TEC70022110
		Flame Spread-Single cable as per IEC/EN 60332-1-2	TEC ER No. TEC70022110

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SI. Telecom Test Parameter or Type of Testing Standard/ Specification No. Equipment/ Product **Optical Fibre** Variant-2: Attenuation as per IEC-60793-1-40 TEC ER No. (i) at 1310nm TEC70022110 Cable **Optical Fibre** (ii) at 1383nm Cable - ADSS (iii) at 1490 nm on Aerial (iv) at 1550nm Alignment (v) at 1625nm PMD as per IEC 60793-1-48 TEC ER No. (a) Cabled Loose Fibre TEC70022110 (b) Cabled Ribbon Fibre Cable Cut-off wavelength as per TEC ER No. IEC 60793-1-44 TEC70022110 Tensile Strength Test as per TEC ER No. IEC 60793-1-21 TEC70022110

Crush Resistance as per TEC ER No. IEC 60793-1-21 TEC70022110 Impact Test as per TEC ER No. IEC 60793-1-21 TEC70022110 TEC ER No. Kink Test as per IEC C 60794-1-21 TEC70022110

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Telecom Test Parameter or Type of Testing Standard/ SI. No. Equipment/ Specification Product TEC ER No. **Optical Fibre** Variant-2: Bend Test as per

Cable	Optical Fibre Cable - ADSS on Aerial Alignment	IEC 60794-1-21	TEC70022110
		Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Cable drip Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Aeolian Vibration Test as per IEEE 1222	TEC ER No. TEC70022110
		Galloping Test as per IEEE 1222	TEC ER No. TEC70022110
		Creep Test as per IEC 60794-4-20	TEC ER No. TEC70022110
		Snatch Test as per IEC 60794-1-2-E9	TEC ER No. TEC70022110
		Temperature Cycling as per IEC 60794-1-22	TEC ER No. TEC70022110

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SI. No.	Telecom Equipment/ Product Optical Fibre Cable	Test Parameter or Type of Testing		Standard/ Specification
		Variant-2: Optical Fibre	Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Cable - ADSS on Aerial	Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Alignment	UV Radiation Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Check of the effect of aggression media on the cable as per ISO 175	TEC ER No. TEC70022110
			Cable Material Compatibility as per Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110
			Kink resistance Test as per IEC 60794-1-23	TEC ER No. TEC70022110
			Drainage Test/Compound Flow Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
			Water tightness /Water Blocking test as per IEC 60794-1-22	TEC ER No. TEC70022110

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Test Parameter or Type of Testing SI. Telecom Standard/ No. Equipment/ Specification Product **Optical Fibre** Variant-2: Strippability Test - Tight Buffer as per TEC ER No. IEC 60794-3, IEC 60793-1-32, TEC70022110 Cable **Optical Fibre** IEC 60793-1-32:2010 Cable - ADSS Ribbon Dimension as per TEC ER No. on Aerial IEC 60794-1-23, IEC 60794-3 TEC70022110 Alignment Separability of individual fibres TEC ER No. from ribbon as per TEC70022110 IEC 60794-1-23, IEC 60794-3 Ribbon Compression Resistance as TEC ER No. TEC70022110 per IEC 60794-1-31. IEC 60794-3 Ribbon Torsion Resistance as per TEC ER No. IEC 60794-1-31, IEC 60794-3 TEC70022110 Ribbon Micro-bend as per TEC ER No. IEC 60794-1-31, IEC 60794-3 TEC70022110 Ribbon Stripability Test as per TEC ER No. IEC 60794-1-21, IEC 60794-3 TEC70022110 Mode Field Diameter at 1310 TEC ER No. nm/1550 nm as per TEC70022110 IEC60793-1-45

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Telecom SI. Test Parameter or Type of Testing Standard/ No. Equipment/ Specification Product **Optical Fibre** Variant-2: Cladding Diameter as per TEC ER No. IEC 60793-1-20 Cable **Optical Fibre** TEC70022110 Cable - ADSS Cladding Non-Circularity as per TEC ER No. IEC 60793-1-20 on Aerial TEC70022110 Alignment Core Clad concentricity error as per TEC ER No. IEC 60793-1-20 TEC70022110 Coating diameter as per TEC ER No. IEC 60793-1-21, IEC 60793-2-50 TEC70022110 Coating/Cladding Concentricity as perTEC ER No. IEC 60793-1-21, IEC 60793-2-50 TEC70022110 Chromatic Dispersion as per TEC ER No. IEC 60793-1-42, IEC 60793-2-50 TEC70022110 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band Zero Dispersion slope as per TEC ER No. IEC 60793-1-42 TEC70022110 Zero Dispersion wavelength range as TEC ER No. per TEC70022110 IEC 60793-1-42 Shines

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Telecom Test Parameter or Type of Testing Standard/ SI. No. Equipment/ Specification Product **Optical Fibre** Variant-2: Fibre Macro bend loss as per ITU-T TEC ER No. G.65x, ITU-T G.650.1, IEC 60793-TEC70022110 Cable **Optical Fibre** 2-50 and IEC 60793-1-47: Cable - ADSS on Aerial (i) Change in attenuation when fiber Alignment is coiled with 100 turns on 60 ± 1.0 mm diameter mandrel (ii) Change in attenuation when fiber is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel (iii) Change in attenuation when fiber is coiled with 100 turns on 50 ±0.5 mm diameter mandrel

> (iv) Change in attenuation when fibre is coiled with 10 turns on 15 mm radius mandrel

(v) Change in attenuation when fibre is coiled with 1 turn on 10 mm

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	Telecom	Test Parameter or Type of Testing	Standard/
No.	Equipment/		Specification
	Product		

		radius mandrel (vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel (vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel	
Optical Fibre Cable	Variant-2: Optical Fibre Cable - ADSS on Aerial Alignment	Peak Stripability force to remove Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32	TEC ER No. TEC70022110
		Fiber Curl as per IEC 60793-2-50, IEC 60793-1-34	TEC ER No. TEC70022110

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Test Parameter or Type of Testing Standard/ SI. Telecom No. Equipment/ Specification Product Variant-3: Attenuation as per IEC-60793-1-40 TEC ER No. **Optical Fibre** (i) at 1310nm TEC70022110 **Optical Fibre** Cable (ii) at 1383nm Cable ADSS

Cable- ADSS over Power line	(iii) at 1490 nm (iv) at 1550nm (v) at 1625nm	
	PMD as per IEC 60793-1-48 (a) Cabled Loose Fibre (b) Cabled Ribbon Fibre	TEC ER No. TEC70022110
	Cable Cut-off wavelength as per IEC 60793-1-44	TEC ER No. TEC70022110
	Tensile Strength Test as per IEC 60793-1-21	TEC ER No. TEC70022110
	Crush Resistance as per IEC 60793-1-21	TEC ER No. TEC70022110
	Impact Test as per IEC 60793-1-21	TEC ER No. TEC70022110
	Kink Test as per IEC C 60794-1-21	TEC ER No. TEC70022110
	Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-3: Optical Fibre	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Cable- ADSS over Power line	Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Cable drip Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Aeolian Vibration Test as per IEEE 1222	TEC ER No. TEC70022110
			Galloping Test as per IEEE 1222	TEC ER No. TEC70022110
			Creep Test as per IEC 60794-4-20	TEC ER No. TEC70022110
			Snatch Test as per IEC 60794-1-2-E9	TEC ER No. TEC70022110
			Electrical Test/ Tracking & Erosion	TEC ER No.

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TEC70022110

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Test as per

IEC60794-4-20



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Sl. Telecom No. Equipment/ Product	Test Parameter of	Test Parameter or Type of Testing	
Optical Fibre Cable	Variant-3: Optical Fibre	Temperature Cycling as per IEC 60794-1-22	TEC ER No. TEC70022110
	Cable- ADSS over Power line	Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		UV Radiation Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Check of the effect of aggression media on the cable ISO 175	TEC ER No. TEC70022110
		Cable Material Compatibility Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110
		Kink resistance Test as per IEC 60794-1-23	TEC ER No. TEC70022110
		Drainage Test/Compound Flow Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110

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Sl. Telecom No. Equipment/ Product		Test Parameter or Type of Testing		Standard/ Specification	
	Optical Fibre Cable	Variant-3: Optical Fibre Cable- ADSS	Water tightness / Water Blocking test as per IEC 60794-1-22	TEC ER No. TEC70022110	
		over Power line	Strippability Test - Tight Buffer Test as per IEC 60794-3, IEC 60793-1-32, IEC 60793-1-32:2010	TEC ER No. TEC70022110	
			Ribbon Dimension as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110	
			Separability of individual fibres from ribbon as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110	
			Ribbon Compression Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110	
			Ribbon Torsion Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110	
			Ribbon Micro-bend as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110	
			Ribbon Stripability Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110	

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SI. No.	Telecom Equipment/ Product Optical Fibre Cable	Test Parameter or Type of Testing		Standard/ Specification
		Optical Fibre 1550m	Mode Field Diameter at 1310 nm/ 1550nm as per IEC60793-1-45	TEC ER No. TEC70022110
		over Power line	Cladding Diameter as per IEC 60793-1-20	TEC ER No. TEC70022110
			Cladding Non-Circularity as per IEC 60793-1-20	TEC ER No. TEC70022110
			Core Clad concentricity error as per IEC 60793-1-20	TEC ER No. TEC70022110
			Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
			Coating/Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
ŝ			Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110

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SI. Telecom Test Parameter or Type of Testing No. Equipment/ Product	Standard/ Specification
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Optical Fibre Cable	Variant-3: Optical Fibre	Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
	Cable- ADSS over Power line	Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110
		Fibre Macro bend loss as per ITU- T G.65x, ITU-T G.650.1, IEC 60793-2-50 and IEC 60793-1-47:	TEC ER No. TEC70022110
		(i) Change in attenuation when fiber is coiled with 100 turns on 60 ± 1.0 mm diameter mandrel	
		(ii) Change in attenuation when fiber is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel	
		(iii) Change in attenuation whenfiber is coiled with 100 turns on 50±0.5 mm diameter mandrel	

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SI. No.	Telecom Test Parameter or Type of Testing Equipment/ Product		or Type of Testing	Standard/ Specification
	Optical Fibre Cable	Variant-3: Optical Fibre Cable- ADSS over Power line	(iv) Change in attenuation when fibre is coiled with 10 turns on 15 mm radius mandrel	
			(v) Change in attenuation when fibre is coiled with 1 turn on 10 mm radius mandrel	
			(vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel	
			(vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel	
			Peak Stripability force to remove Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32	TEC ER No. TEC70022110
			Fiber Curl as per IEC 60793-2-50, IEC 60793-1-34	TEC ER No. TEC70022110

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SI. Telecom Test Parameter or Type of Testing Standard/ No. Equipment/ Specification Product **Optical Fibre** Variant-4: Attenuation as per IEC-60793-1-40 TEC ER No. Cable (i) at 1310nm **Optical Fibre** TEC70022110 (ii) at 1383nm Cable- Direct (iii) at 1490 nm Buried

buried	(iv) at 1550nm (v) at 1625nm	
	PMD as per IEC 60793-1-48 (a) Cabled Loose Fibre (b) Cabled Ribbon Fibre	TEC ER No. TEC70022110
	Cable Cut-off wavelength as per IEC 60793-1-44	TEC ER No. TEC70022110
	Tensile Strength Test as per IEC 60793-1-21	TEC ER No. TEC70022110
	Crush Resistance as per IEC 60793-1-21	TEC ER No. TEC70022110
	Impact Test as per IEC 60793-1-21	TEC ER No. TEC70022110
	Kink Test as per IEC C 60794-1-21	TEC ER No. TEC70022110
	Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110

Director (C)



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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-4: Optical Fibre	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Cable- Direct Buried	Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Cable drip Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Temperature Cycling as per IEC 60794-1-22	TEC ER No. TEC70022110
			Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			UV Radiation Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Check of the effect of aggression media on the cable as per ISO 175	TEC ER No. TEC70022110

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-4: Optical Fibre	Cable Material Compatibility as per Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110
		Cable- Direct Buried	Electrical Continuity Test as per IEC 60794-1-24, IEC 60794- 3-11	TEC ER No. TEC70022110
			Kink Resistance Test as per IEC 60794-1-23	TEC ER No. TEC70022110
			Drainage Test/ Compound Flow Test as per IEC 60794-1-21, IEC 60794-3, IEC 60794-3	TEC ER No. TEC70022110
			Water tightness /Water Blocking test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Strippability Test -Tight Buffer Test as per IEC 60794-3, IEC 60793-1-32, IEC 60793-1-32:2010	TEC ER No. TEC70022110

Ribbon Dimension as per

IEC 60794-1-23, IEC 60794-3

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AD (CA), TEC

TEC ER No.

TEC70022110

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110. 3, Khurshid Lai Dhawan, Janpaun, New Denn - 110

SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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Last Amended on:

SI. Telecom No. Equipment/ Product		Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-4: Optical Fibre Cable- Direct	Separability of individual fibres from ribbon as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
		Buried	Ribbon Compression Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Torsion Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Micro-bend as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Stripability Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
			Mode Field Diameter at 1310 nm/ 1550 nm as per IEC60793-1-45	TEC ER No. TEC70022110
		Cladding Diameter as per IEC 60793-1-20	TEC ER No. TEC70022110	
			Cladding Non-Circularity as per IEC 60793-1-20	TEC ER No. TEC70022110
			Core Clad concentricity error as per IEC 60793-1-20	TEC ER No. TEC70022110

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Director (CA), TEC



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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 Sl.
 Telecom
 Test Parameter or Type of Testing
 Standard/

 No.
 Equipment/ Product
 Product
 Specification

	Optical Fibre Cable	Variant-4: Optical Fibre Cable- Direct	Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
		Buried	Coating/Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
			Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50	TEC ER No. TEC70022110
			(i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	
			Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
			Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name:

 M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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Last Amended on:

SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-4: Optical Fibre Cable- Direct Buried	 Fibre Macro bend loss as per ITU- T G.65x ,ITU-T G.650.1, IEC 60793-2-50 and IEC 60793-1-47: (i) Change in attenuation when fiber is coiled with 100 turns on 60 ±1.0 mm diameter mandrel (ii) Change in attenuation when fiber is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel (iii) Change in attenuation when fiber is coiled with 100 turns on 50 ±0.5 mm diameter mandrel (iv) Change in attenuation when fibre is coiled with 10 turns on 15 mm radius mandrel (v) Change in attenuation when fibre is coiled with 1 turn on 10 mm radius mandrel 	TEC ER No. TEC70022110

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. Telecom Test Parameter or Type of Testing Standard/ No. Equipment/ Specification Product Variant-4: **Optical Fibre** (vi) Change in attenuation when Cable **Optical Fibre** fibre is coiled with 1 turn on 7.5 Cable- Direct mm radius mandrel Buried (vii) Change in attenuation when fibre is coiled with 1 turn on 5mm radius mandrel. Peak Stripability force to remove TEC ER No. Primary coating of the fiber TEC70022110 (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32 TEC ER No. Fiber Curl as per TEC70022110 IEC 60793-2-50, IEC 60793-1-34

Surv Director (CA), TEC *The validity of Certificate is up to 29/08/2025 or the continued validity of NABL Accreditation



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Validity: 30/08/2022 to 29/08/2025

Test Parameter or Type of Testing Standard/ Telecom SI. No. Equipment/ Specification Product **Optical Fibre** Variant-5: Attenuation as per IEC-60793-1-40 TEC ER No. (i) at 1310nm TEC70022110 Cable **Optical Fibre** (ii) at 1383nm Cable- DSA (iii) at 1490 nm (iv) at 1550nm (v) at 1625nm PMD as per IEC 60793-1-48 TEC ER No. (a) Cabled Loose Fibre TEC70022110 (b) Cabled Ribbon Fibre Cable Cut-off wavelength as per TEC ER No. IEC 60793-1-44 TEC70022110 Tensile Strength Test as per TEC ER No. IEC 60793-1-21 TEC70022110 Crush Resistance as per TEC ER No. TEC70022110 IEC 60793-1-21 Impact Test as per TEC ER No. TEC70022110 IEC 60793-1-21 TEC ER No. Kink Test as per IEC C 60794-1-21 TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Last Amended on:

SI. Telecom Test Parameter or Type of Testing No. Equipment/ Product	Standard/ Specification
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Optical Fibre Cable	Variant-5: Optical Fibre	Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
	Cable- DSA	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Cable drip Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Temperature Cycling Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		UV Radiation Test as per IEC 60794-1-22	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Test Parameter or Type of Testing Standard/ SI. Telecom Specification No. Equipment/ Product **Optical Fibre** Variant-5: Check of the effect of aggression TEC ER No. TEC70022110 Cable **Optical Fibre** media on the cable as per Cable- DSA **ISO 175** Cable Material Compatibility as per TEC ER No. Telecordia GR 20, IEC 60794- 3-11 TEC70022110 TEC ER No. Electrical Continuity Test as per IEC 60794-1-24, IEC 60794- 3-11 TEC70022110 Kink resistance Test as per TEC ER No. IEC 60794-1-23 TEC70022110 Drainage Test/Compound Flow test TEC ER No. as per TEC70022110 IEC 60794-1-21, IEC 60794-3 Water tightness / Water Blocking test TEC ER No. TEC70022110 as per IEC 60794-1-22 Strippability Test - Tight Buffer as perTEC ER No. IEC 60794-3, IEC 60793-1-32, TEC70022110 IEC 60793-1-32:2010 Ribbon Dimension as per TEC ER No. IEC 60794-1-23, IEC 60794-3 TEC70022110

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Last Amended on:

SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-5: Optical Fibre Cable- DSA	Separability of individual fibres from ribbon as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
		Cable DOA	Ribbon Compression Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Torsion Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Micro-bend as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Stripability Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
			Mode Field Diameter at 1310 nm/1550nm as per IEC60793-1-45	TEC ER No. TEC70022110
			Cladding Diameter as per IEC 60793-1-20	TEC ER No. TEC70022110
			Cladding Non-Circularity as per IEC 60793-1-20	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Last Amended on:

Sl. Telecom No. Equipment/ Product	Test Parameter	Test Parameter or Type of Testing	
Optical Fibre Cable	e Variant-5: Optical Fibre Cable- DSA	Core Clad Concentricity error as per IEC 60793-1-20	TEC ER No. TEC70022110
		Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
		Coating/Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
		Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110
		Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
		Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Last Amended on:

Sl. Telecom No. Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
Optical Fibre Cable	Variant-5: Optical Fibre Cable- DSA	 Fibre Macro bend loss as per ITU-T G.65x ,ITU-T G.650.1, IEC 60793- 2-50 and IEC 60793-1-47: (i) Change in attenuation when fiber is coiled with 100 turns on 60 ±1.0 mm diameter mandrel (ii) Change in attenuation when fiber is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel (iii) Change in attenuation when fiber is coiled with 100 turns on 50 ±0.5 mm diameter mandrel (iv) Change in attenuation when fibre is coiled with 10 turns on 15 mm radius mandrel 	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Telecom Test Parameter or Type of Testing Standard/ SI. No. Equipment/ Specification Product **Optical Fibre** Variant-5: (v) Change in attenuation when fibre TEC ER No. TEC70022110 is coiled with 1turn on 10 mm radius Cable **Optical Fibre** Cable- DSA mandrel (vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel (vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel. Peak Stripability force to remove TEC ER No. Primary coating of the fiber (Unaged, TEC70022110 Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32 Fiber Curl as per TEC ER No. IEC 60793-2-50, IEC 60793-1-34 TEC70022110

CA), TEC Director (

AD (CA), TEC



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Last Amended on:

Sl. Telecom No. Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
Optical Fibre Cable	Variant-6: Optical Fibre Cable- Duct	Attenuation as per IEC-60793-1-40 (i) at 1310nm (ii) at 1383nm (iii) at 1490 nm (iv) at 1550nm (v) at 1625nm	TEC ER No. TEC70022110
		PMD as per IEC 60793-1-48 (a) Cabled Loose Fibre (b) Cabled Ribbon Fibre	TEC ER No. TEC70022110
		Cable Cut-off wavelength as per IEC 60793-1-44	TEC ER No. TEC70022110
		Tensile Strength Test as per IEC 60793-1-21	TEC ER No. TEC70022110
1.1		Crush Resistance as per IEC 60793-1-21	TEC ER No. TEC70022110
		Impact Test as per IEC 60793-1-21	TEC ER No. TEC70022110
		Kink Test as per IEC C 60794-1-21	TEC ER No. TEC70022110
		Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name:

M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Sl. Telecom No. Equipment/ Product	Test Parameter or Type of Testing	Standard/ Specification
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Optical Fibre Cable	Variant-6: Optical Fibre Cable- Duct	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Cable drip Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Temperature Cycling Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		UV Radiation Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Check of the effect of aggression media on the cable as per ISO 175	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-6: Optical Fibre	Cable Material Compatibility as per Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110
		Cable- Duct	Electrical Continuity Test as per IEC 60794-1-24, IEC 60794- 3-11	TEC ER No. TEC70022110
			Kink resistance Test as per IEC 60794-1-23	TEC ER No. TEC70022110
			Drainage Test/Compound Flow as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
			Water tightness / Water Blocking test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Strippability Test -tight Buffer as per IEC 60794-3, IEC 60793-1-32, IEC 60793-1-32:2010	TEC ER No. TEC70022110
			Ribbon Dimension as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
			Separability of individual fibres from ribbon as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product Optical Fibre Cable	Test Parameter or Type of Testing		Standard/ Specification
		Variant-6: Optical Fibre Cable- Duct	Ribbon Compression Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
		Cane- Duct	Ribbon Torsion Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Micro-bend as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Stripåbility Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
			Mode Field Diameter at 1310 nm/1550 nm as per IEC60793-1-45	TEC ER No. TEC70022110
			Cladding Diameter as per IEC 60793-1-20	TEC ER No. TEC70022110
			Cladding Non-Circularity as per IEC 60793-1-20	TEC ER No. TEC70022110
	1.55		Core Clad Concentricity error as per IEC 60793-1-20	TEC ER No. TEC70022110
			Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION

(ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-6: Optical Fibre Cable- Duct	Coating /Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
			Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110
			Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
			Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Sl. Telecom No. Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
Optical Fibre Cable	Variant-6: Optical Fibre Cable- Duct	 Fibre Macro bend loss as per ITU-T G.65x ,ITU-T G.650.1, IEC 60793- 2-50 and IEC 60793-1-47: (i) Change in attenuation when fibre is coiled with 100 turns on 60 ±1.0 mm diameter mandrel (ii) Change in attenuation when fibre is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel (iii) Change in attenuation when fibre is coiled with 100 turns on 50 ±0.5 mm diameter mandrel (iv) Change in attenuation when fibre is coiled with 10 turns on 15 mm radius mandrel 	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Last Amended on: ____

SI. Telecom No. Equipment/ Product		Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-6: Optical Fibre Cable- Duct	 (v) Change in attenuation when fibre is coiled with 1 turn on 10 mm radius mandrel (vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel (vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel 	TEC ER No. TEC70022110
			Peak Stripability force to remove Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32	TEC ER No. TEC70022110
			Fiber Curl as per IEC 60793-2-50, IEC 60793-1-34	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name:

M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Test Parameter or Type of Testing Standard/ SI. Telecom No. Equipment/ Specification Product Attenuation as per IEC-60793-1-40 TEC ER No. **Optical Fibre** Variant-7: (i) at 1310nm TEC70022110 Cable **Optical Fibre** (ii) at 1383nm Cable- In (iii) at 1490 nm Home (iv) at 1550nm (v) at 1625nm TEC ER No. PMD as per IEC 60793-1-48 TEC70022110 (a) Cabled Loose Fibre (b) Cabled Ribbon Fibre Cable Cut-off wavelength as per TEC ER No. IEC 60793-1-44 TEC70022110 TEC ER No. Tensile Strength as per IEC 60793-1-21 TEC70022110 Crush Resistance as per TEC ER No. IEC 60793-1-21 TEC70022110 Impact Test as per TEC ER No. IEC 60793-1-21 TEC70022110 TEC ER No. Kink Test as per IEC C 60794-1-21 TEC70022110 TEC ER No. Bend Test as per TEC70022110 IEC 60794-1-21

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SCOPE OF DESIGNATION

(ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-7: Optical Fibre	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Cable- In Home	Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Temperature Cycling as per IEC 60794-1-22	TEC ER No. TEC70022110
	1.10		Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Check of the effect of aggression media on the cable as per ISO 175	TEC ER No. TEC70022110
			Cable Material Compatibility as per Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110
			Mode Field Diameter at 1310 nm/1550nm as per IEC60793-1-45	TEC ER No. TEC70022110
		12	Cladding Diameter as per IEC 60793-1-20	TEC ER No. TEC70022110
			Cladding Non-Circularity as per IEC 60793-1-20	TEC ER No. TEC70022110
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SCOPE OF DESIGNATION (ANNEXURE)

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Sl. No.	Telecom Equipment/ Product Optical Fibre Cable	Test Parameter or Type of Testing		Standard/ Specification
		Variant-7: Optical Fibre	Core Clad Concentricity error as per IEC 60793-1-20	TEC ER No. TEC70022110
		Cable- In Home	Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
			Coating /Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
			Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110
			Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
			Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. Telecom Test Parameter or Type of Testing Standard/ No. Equipment/ Specification Product Variant-7: **Optical Fibre** Fibre Macro bend loss as per ITU-T TEC ER No. TEC70022110 Cable **Optical Fibre** G.65x ,ITU-T G.650.1, IEC 60793-Cable- In 2-50 and IEC 60793-1-47: Home (i) Change in attenuation when fibre is coiled with 100 turns on 60 ± 1.0 mm diameter mandrel

mm diameter mandrel (ii) Change in attenuation when fibre is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel (iii) Change in attenuation when fibre is coiled with 100 turns on 50 ±0.5 mm diameter mandrel (iv) Change in attenuation when fibre is coiled with 10 turns on 15 mm radius mandrel

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 Sl. Telecom No. Equipment/ Product
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 Variant-7: Cable
 Variant-7: Optical Fibre Cable- In
 (v) Change in attenuation when fibre is coiled with 1 turn on 10 mm radius mandrel
 TEC ER No. TEC70022110

Cable- In Home	radius mandrel (vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel (vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel.	
	Peak Stripability force to remove Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32	TEC ER No. TEC70022110
	Fiber Curl as per IEC 60793-2-50, IEC 60793-1-34	TEC ER No. TEC70022110
	Flame Spread-Single cable as per IEC/EN 60332-1-2	TEC ER No. TEC70022110

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-8: Optical Fibre Cable- Indoor	Attenuation as per IEC-60793-1-40 (i) at 1310nm (ii) at 1383nm (iii) at 1490 nm (iv) at 1550nm (v) at 1625nm	TEC ER No. TEC70022110
			PMD as per IEC 60793-1-48 (a) Cabled Loose Fibre (b) Cabled Ribbon Fibre	TEC ER No. TEC70022110
			Cable Cut-off wavelength as per IEC 60793-1-44	TEC ER No. TEC70022110
			Tensile Strength as per IEC 60793-1-21	TEC ER No. TEC70022110
			Crush Resistance as per IEC 60793-1-21	TEC ER No. TEC70022110
			Impact Test as per IEC 60793-1-21	TEC ER No. TEC70022110
			Kink Test as per IEC C 60794-1-21	TEC ER No. TEC70022110

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	Optical Fibre Cable	Variant-8: Optical Fibre	Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Cable- Indoor	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Cable drip Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Temperature Cycling Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Check of the effect of aggression media on the cable as per ISO 175	TEC ER No. TEC70022110

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Optical Fibre Cable	Variant-8: Optical Fibre	Cable Material Compatibility as per Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110
	Cable- Indoor	Kink resistance Test as per IEC 60794-1-23	TEC ER No. TEC70022110
		Drainage Test/Compound Flow test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
		Water tightness / Water Blocking test IEC 60794-1-22	TEC ER No. TEC70022110
		Strippability Test -Tight Buffer as per IEC 60794-3, IEC 60793-1-32, IEC 60793-1-32:2010	TEC ER No. TEC70022110
		Ribbon Dimension as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
		Separability of individual fibres from ribbon as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
		Ribbon Compression Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

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Sl. Telecom No. Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
Optical Fibre Cable	Variant-8: Optical Fibre	Ribbon Torsion Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
	Cable- Indoor	Ribbon Micro-bend as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
		Ribbon Stripability Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
		Mode Field Diameter at 1310 nm/1550 nm as per IEC60793-1-45	TEC ER No. TEC70022110
		Cladding Diameter Test IEC 60793-1-20	TEC ER No. TEC70022110
		Cladding Non-Circularity Test IEC 60793-1-20	TEC ER No. TEC70022110
	-	Core Clad Concentricity error as per IEC 60793-1-20	TEC ER No. TEC70022110
		Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Cable	Optical Fibre Cable- Indoor	per IEC 60793-1-21, IEC 60793-2-50	TEC70022110
		Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110
		Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
		Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110
		Cable- Indoor	Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band Zero Dispersion slope as per IEC 60793-1-42 Zero Dispersion wavelength range as per

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Optical Fibre	Variant-8:	Fibre Macro bend loss as per ITU-T	TEC ER No.
Cable	Optical Fibre	G.65x ,ITU-T G.650.1, IEC 60793-	TEC70022110
	Cable- Indoor	2-50 and IEC 60793-1-47:	
		(i) Change in attenuation when fibre	
		is coiled with 100 turns on 60 ± 1.0	
		mm diameter mandrel	
		(ii) Change in attenuation when fibre	
		is coiled with 1 turn around 32 ± 0.5	
		mm diameter mandrel	
		(iii) Change in attenuation when	
		fibre is coiled with 100 turns on 50	
		±0.5 mm diameter mandrel	
		(iv) Change in attenuation when fibre	
		is coiled with 10 turns on 15 mm radius mandrel	



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SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Optical Fibre Cable	Variant-8: Optical Fibre Cable- Indoor	 (v) Change in attenuation when fibre is coiled with 1 turn on 10 mm radius mandrel (vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel (vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel. 	TEC ER No. TEC70022110
			Peak Stripability force to remove Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32	TEC ER No. TEC70022110
			Fiber Curl as per IEC 60793-2-50, IEC 60793-1-34	TEC ER No. TEC70022110
			Flame Spread-Single cable as per IEC/EN 60332-1-2	TEC ER No. TEC70022110

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Sl. Telecom No. Equipmen Product		or Type of Testing	Standard/ Specification
Optical I Cable	Fibre Variant-9: Optical Fibre Cable- Indoor/ Outdoor	Attenuation as per IEC-60793-1-40 (i) at 1310nm (ii) at 1383nm (iii) at 1490 nm (iv) at 1550nm (v) at 1625nm	TEC ER No. TEC70022110
		PMD as per IEC 60793-1-48 (a) Cabled Loose Fibre (b) Cabled Ribbon Fibre	TEC ER No. TEC70022110
		Cable Cut-off wavelength as per IEC 60793-1-44	TEC ER No. TEC70022110
	×	Tensile Strength as per IEC 60793-1-21	TEC ER No. TEC70022110
		Crush Resistance as per IEC 60793-1-21	TEC ER No. TEC70022110
		Impact Test as per IEC 60793-1-21	TEC ER No. TEC70022110
		Kink Test as per IEC C 60794-1-21	TEC ER No. TEC70022110

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	Optical Fibre Cable	Variant-9: Optical Fibre	Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Cable- Indoor/ Outdoor	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Cable drip Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Temperature Cycling Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			UV Radiation Test as per IEC 60794-1-22	TEC ER No. TEC70022110

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-9: Optical Fibre Cable- Indoor/	Check of the effect of aggression media on the cable as per ISO 175	TEC ER No. TEC70022110
		Outdoor	Cable Material Compatibility as per Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110
			Kink resistance Test as per IEC 60794-1-23	TEC ER No. TEC70022110
			Drainage Test/Compound Flow as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
			Water tightness / Water Blocking test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Strippability Test - Tight Buffer as per IEC 60794-3, IEC 60793-1-32, IEC 60793-1-32:2010	TEC ER No. TEC70022110
			Ribbon Dimension as per	TEC ER No. TEC70022110
			IEC 60794-1-23, IEC 60794-3	
			Separability of individual fibres from ribbon as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110

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Optical Fibre Cable	Variant-9: Optical Fibre Cable- Indoor/	Ribbon Compression Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
	Outdoor	Ribbon Torsion Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
		Ribbon Micro-bend as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
		Ribbon Stripability Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
		Mode Field Diameter at 1310 nm/1550 nm as per IEC60793-1-45	TEC ER No. TEC70022110
		Cladding Diameter as per IEC 60793-1-20	TEC ER No. TEC70022110
		Cladding Non-Circularity as per IEC 60793-1-20	TEC ER No. TEC70022110
		Core Clad Concentricity error as per IEC 60793-1-20	TEC ER No. TEC70022110

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Optical Fibre Cable	Variant-9: Optical Fibre	Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
	Cable- Indoor/ Outdoor	Coating /Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
		Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110
		Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
		Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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Validity: 30/08/2022 to 29/08/2025

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Sl. Telecom No. Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
Optical Fibre Cable	Variant-9: Optical Fibre Cable- Indoor/ Outdoor	 Fibre Macro bend loss as per ITU-T G.65x ,ITU-T G.650.1, IEC 60793- 2-50 and IEC 60793-1-47: (i) Change in attenuation when fibre is coiled with 100 turns on 60 ±1.0 mm diameter mandrel (ii) Change in attenuation when fibre is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel (iii) Change in attenuation when fibre is coiled with 100 turns on 50 ±0.5 mm diameter mandrel (iv) Change in attenuation when fibre is coiled with 10 turns on 15 mm radius mandrel 	TEC ER No. TEC70022110

Director (CA), TEC

TEC

GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS TELECOMMUNICATION ENGINEERING CENTRE Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001



SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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Validity: 30/08/2022 to 29/08/2025

Last Amended on: La.

No. I	Telecom Test Parameter or Type of Testing Description: Equipment/ Product		or Type of Testing	Standard/ Specification
	Optical Fibre Cable	Variant-9: Optical Fibre Cable- Indoor/ Outdoor	 (v) Change in attenuation when fibre is coiled with 1 turn on 10 mm radius mandrel (vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel (vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel. 	TEC ER No. TEC70022110
			Peak Stripability force to remove Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32	TEC ER No. TEC70022110
			Fiber Curl as per IEC 60793-2-50, IEC 60793-1-34	TEC ER No. TEC70022110
			Flame Spread-Single cable as per IEC/EN 60332-1-2	TEC ER No. TEC70022110

Director (CA), TEC AD (CA), TEC



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Validity: 30/08/2022 to 29/08/2025

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SI. Telecom No. Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
Optical Fibre Cable	Variant-10: Optical Fibre Cable- Lashed Aerial	Attenuation as per IEC-60793-1-40 (i) at 1310nm (ii) at 1383nm (iii) at 1490 nm (iv) at 1550nm (v) at 1625nm	TEC ER No. TEC70022110
		PMD as per IEC 60793-1-48 (a) Cabled Loose Fibre (b) Cabled Ribbon Fibre	TEC ER No. TEC70022110
		Cable Cut-off wavelength as per IEC 60793-1-44	TEC ER No. TEC70022110
		Tensile Strength as per IEC 60793-1-21	TEC ER No. TEC70022110
		Crush Resistance as per IEC 60793-1-21	TEC ER No. TEC70022110
		Impact Test as per IEC 60793-1-21	TEC ER No. TEC70022110
		Kink Test as per IEC C 60794-1-21	TEC ER No. TEC70022110

AD (CA), TEC

Director (CA), TEC



Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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 SI.
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 No.
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Product
 Product
 Specification

Optical Fibre Cable	Variant-10: Optical Fibre	Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
	Cable- Lashed Aerial	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Cable drip Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Temperature Cycling Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		UV Radiation Test as per IEC 60794-1-22	TEC ER No. TEC70022110

Director (CA), TEC

AD (CA), TEC



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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Last Amended on:

SI.	Telecom	Test Parameter or Type of Testing	Standard/
No.	Equipment/		Specification
	Product		

Optical Fibre Cable	Variant-10: Optical Fibre Cable- Lashed	Check of the effect of aggression media on the cable as per ISO 175	TEC ER No. TEC70022110
	Aerial	Cable Material Compatibility as per Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110
		Kink resistance Test as per IEC 60794-1-23	TEC ER No. TEC70022110
		Drainage Test/Compound Flow as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
		Water tightness / Water Blocking test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Strippability Test - Tight Buffer as per IEC 60794-3, IEC 60793-1-32, IEC 60793-1-32:2010	TEC ER No. TEC70022110
		Ribbon Dimension as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110

Director (CA), TEC whichever is earlier.

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-10: Optical Fibre Cable- Lashed	Separability of individual fibres from ribbon as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
		Aerial	Ribbon Compression Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Torsion Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Micro-bend as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Stripability Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
			Mode Field Diameter at 1310 nm/1550 nm as per IEC60793-1-45	TEC ER No. TEC70022110
			Cladding Diameter as per IEC 60793-1-20	TEC ER No. TEC70022110
			Cladding Non-Circularity as per IEC 60793-1-20	TEC ER No. TEC70022110

Director (C A), TEC

AD (CA), TEC



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Last Amended on: ____

SI.	Telecom	Test Parameter or Type of Testing	Standard/
No.	Equipment/	12101	Specification
	Product		

Optical Fibre Cable	Variant-10: Optical Fibre	Core Clad Concentricity error as per IEC 60793-1-20	TEC ER No. TEC70022110
	Cable- Lashed Aerial	Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
		Coating /Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
		Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110
		Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
-		Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110

Director (CA), TEC

AD (CA), TEC



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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Sl. Telecom No. Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
Optical Fibre Cable	Variant-10: Optical Fibre Cable- Lashed Aerial	 Fibre Macro bend loss as per ITU-T G.65x ,ITU-T G.650.1, IEC 60793- 2-50 and IEC 60793-1-47: (i) Change in attenuation when fibre is coiled with 100 turns on 60 ±1.0 mm diameter mandrel (ii) Change in attenuation when fibre is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel (iii) Change in attenuation when fibre is coiled with 100 turns on 50 ±0.5 mm diameter mandrel (iv) Change in attenuation when fibre is coiled with 10 turns on 15 mm radius mandrel 	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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 Sl. No.
 Telecom Equipment/Product
 Test Parameter or Type of Testing
 Standard/Specification

 Volume
 Variant-10:
 (v) Change in attenuation when fibre is coiled with 1 turn on 10 mm
 TEC ER No. TEC70022110

 Cable
 Optical Fibre Cable
 Cable-Lashed
 radius mandrel

Cable- Lashed Aerial	radius mandrel (vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel (vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel.	
	Peak Stripability force to remove Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32	TEC ER No. TEC70022110
	Fiber Curl as per IEC 60793-2-50, IEC 60793-1-34	TEC ER No. TEC70022110

AD (CA), TEC

Director (CA), TEC



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Telecom Test Parameter or Type of Testing SL. Standard/ No. Equipment/ Specification Product **Optical Fibre** Variant-11: Attenuation as per IEC-60793-1-40 TEC ER No. (i) at 1310nm TEC70022110 Cable **Optical Fibre** (ii) at 1383nm Cable- Micro-(iii) at 1490 nm Duct (iv) at 1550nm (v) at 1625nm PMD as per IEC 60793-1-48 TEC ER No. (a) Cabled Loose Fibre TEC70022110 (b) Cabled Ribbon Fibre Cable Cut-off wavelength as per TEC ER No. IEC 60793-1-44 TEC70022110 Tensile Strength as per TEC ER No. IEC 60793-1-21 TEC70022110 Crush Resistance as per TEC ER No. IEC 60793-1-21 TEC70022110 Impact Test as per TEC ER No. IEC 60793-1-21 TEC70022110 Kink Test as per TEC ER No. IEC C 60794-1-21 TEC70022110 Bend Test as per TEC ER No. IEC 60794-1-21 TEC70022110

Director (CA), TEC

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GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS TELECOMMUNICATION ENGINEERING CENTRE Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001



SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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 Product
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Optical Fibre Cable	Variant-11: Optical Fibre	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
	Cable- Micro- Duct	Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Cable drip Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Temperature Cycling Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		UV Radiation Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Check of the effect of aggression media on the cable as per ISO 175	TEC ER No. TEC70022110

Director (CA), TEC

AD (CA), TEC

GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS TELECOMMUNICATION ENGINEERING CENTRE Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001



SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Validity: 30/08/2022 to 29/08/2025

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-11: Optical Fibre	Cable Material Compatibility as per Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110
		Cable- Micro- Duct	Kink resistance Test as per IEC 60794-1-23	TEC ER No. TEC70022110
			Drainage Test/Compound Flow as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
			Water tightness / Water Blocking test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Strippability Test - Tight Buffer as per IEC 60794-3, IEC 60793-1-32, IEC 60793-1-32:2010	TEC ER No. TEC70022110
			Ribbon Dimension as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
			Separability of individual fibres from ribbon as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Compression Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110

Director (CA), TEC



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Test Parameter or Type of Testing Standard/ SI. Telecom No. Equipment/ Specification Product Ribbon Torsion Resistance as per TEC ER No. **Optical Fibre** Variant-11: TEC70022110 IEC 60794-1-31, IEC 60794-3 Cable **Optical Fibre** Cable- Micro-TEC ED M

Duct	Ribbon Micro-bend as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
	Ribbon Stripability Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
	Mode Field Diameter at 1310 nm/1550 nm as per IEC60793-1-45	TEC ER No. TEC70022110
	Cladding Diameter as per IEC 60793-1-20	TEC ER No. TEC70022110
	Cladding Non-Circularity as per IEC 60793-1-20	TEC ER No. TEC70022110
	Core Clad Concentricity error as per IEC 60793-1-20	TEC ER No. TEC70022110
	Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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	Optical Fibre Cable	Variant-11: Optical Fibre Cable- Micro-	Coating /Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
		Duct	Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110
			Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
			Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110

Director (CA), TEC

Director (CA), TEC AD (CA), TEC *The validity of Certificate is up to 29/08/2025 or the continued validity of NABL Accreditation, whichever is earlier.

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Standard/ Telecom **Test Parameter or Type of Testing** SI. Specification No. Equipment/ Product Variant-11: TEC ER No. **Optical Fibre** Fibre Macro bend loss as per ITU-T TEC70022110 G.65x .ITU-T G.650.1, IEC 60793-Cable **Optical Fibre** 2-50 and IEC 60793-1-47: Cable- Micro-Duct (i) Change in attenuation when fibre is coiled with 100 turns on 60 ± 1.0 mm diameter mandrel (ii) Change in attenuation when fibre is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel (iii) Change in attenuation when fibre is coiled with 100 turns on 50 ±0.5 mm diameter mandrel

 (iv) Change in attenuation when fibre is coiled with 10 turns on 15 mm radius mandrel

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Director (CA), TEC AD (CA), TEC *The validity of Certificate is up to 29/08/2025 or the continued validity of NABL Accreditation, whichever is earlier.



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Optical Fibre Cable	Variant-11: Optical Fibre Cable- Micro- Duct	 (v) Change in attenuation when fibre is coiled with 1 turn on 10 mm radius mandrel (vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel (vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel. 	TEC ER No. TEC70022110
			Peak Stripability force to remove Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32	TEC ER No. TEC70022110
			Fiber Curl as per IEC 60793-2-50, IEC 60793-1-34	TEC ER No. TEC70022110

Director (CA), TEC

GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS TELECOMMUNICATION ENGINEERING CENTRE Cate No. 5. Khurshid Lel Bharron, Jappath, New Delhi, 110.00



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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 Test Parameter or Type of Testing
 Standard/

 No.
 Equipment/
Product
 Product
 Specification

	Optical Fibre Cable	Variant-12: Optical Fibre Cable- Outdoor	Attenuation as per IEC-60793-1-40 (i) at 1310nm (ii) at 1383nm (iii) at 1490 nm (iv) at 1550nm (v) at 1625nm	TEC ER No. TEC70022110
			PMD as per IEC 60793-1-48 (a) Cabled Loose Fibre (b) Cabled Ribbon Fibre	TEC ER No. TEC70022110
			Cable Cut-off wavelength as per IEC 60793-1-44	TEC ER No. TEC70022110
			Tensile Strength as per IEC 60793-1-21	TEC ER No. TEC70022110
			Crush Resistance as per IEC 60793-1-21	TEC ER No. TEC70022110
			Impact Test as per IEC 60793-1-21	TEC ER No. TEC70022110
			Kink Test as per IEC C 60794-1-21	TEC ER No. TEC70022110
			Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110

Director (CA), TEC

AD (CA), TEC



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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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 Sl.
 Telecom
 Test Parameter or Type of Testing
 Standard/

 No.
 Equipment/
Product
 Specification

	Optical Fibre Cable	Variant-12: Optical Fibre	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Cable- Outdoor	Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Cable drip Testas per IEC 60794-1-22	TEC ER No. TEC70022110
			Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
			Temperature Cycling Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			UV Radiation Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Check of the effect of aggression media on the cable as per ISO 175	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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TEC ER No.

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Validity: 30/08/2022 to 29/08/2025

Test Parameter or Type of Testing Standard/ SI. Telecom Specification No. Equipment/ Product Variant-12: Cable Material Compatibility as per TEC ER No. **Optical Fibre** Telecordia GR 20, IEC 60794- 3-11 TEC70022110 Cable **Optical Fibre** Kink resistance Test as per TEC ER No. Cable-IEC 60794-1-23 TEC70022110 Outdoor Drainage Test/Compound Flow as per TEC ER No. IEC 60794-1-21, IEC 60794-3 TEC70022110 Water tightness / Water Blocking test TEC ER No. TEC70022110 as per IEC 60794-1-22 Strippability Test -Tight Buffer as per TEC ER No. IEC 60794-3, IEC 60793-1-32, TEC70022110 IEC 60793-1-32:2010 Ribbon Dimension as per TEC ER No. IEC 60794-1-23, IEC 60794-3 TEC70022110

from ribbon as per TEC70022110 IEC 60794-1-23, IEC 60794-3 Ribbon Compression Resistance as TEC ER No. TEC70022110 per IEC 60794-1-31, IEC 60794-3

Separability of individual fibres

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Test Parameter or Type of Testing SI. Telecom Standard/ No. Equipment/ Specification Product **Optical Fibre** Variant-12: Ribbon Torsion Resistance as per TEC ER No. IEC 60794-1-31, IEC 60794-3 TEC70022110 Cable **Optical Fibre** Cable-Ribbon Micro-bend as per TEC ER No. Outdoor IEC 60794-1-31, IEC 60794-3 TEC70022110 Ribbon Stripability Test as per TEC ER No. IEC 60794-1-21, IEC 60794-3 TEC70022110 Mode Field Diameter at 1310 TEC ER No. nm/1550 nm as per TEC70022110 IEC60793-1-45 Cladding Diameter as per TEC ER No. IEC 60793-1-20 TEC70022110 Cladding Non-Circularity as per TEC ER No. IEC 60793-1-20 TEC70022110 Core Clad Concentricity error as per TEC ER No. IEC 60793-1-20 TEC70022110 Coating diameter as per TEC ER No. IEC 60793-1-21, IEC 60793-2-50 TEC70022110 Shows

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Variant-12: Optical Fibre Cable-	Coating /Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
Outdoor	Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110
	Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
	Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110
	Optical Fibre	Optical Fibre Cable- Outdoorper IEC 60793-1-21, IEC 60793-2-50OutdoorChromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50(i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm bandZero Dispersion slope as per IEC 60793-1-42Zero Dispersion slope as per IEC 60793-1-42Zero Dispersion slope as per IEC 60793-1-42

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SI. Telecom Test Parameter or Type of Testing Standard/ No. Equipment/ Specification Product **Optical Fibre** Variant-12: Fibre Macro bend loss as per ITU-T TEC ER No. TEC70022110 **Optical Fibre** Cable G.65x JTU-T G.650.1, IEC 60793-Cable-2-50 and IEC 60793-1-47: Outdoor (i) Change in attenuation when fibre is coiled with 100 turns on 60 ± 1.0 mm diameter mandrel (ii) Change in attenuation when fibre is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel (iii) Change in attenuation when fibre is coiled with 100 turns on 50 ±0.5 mm diameter mandrel (iv) Change in attenuation when fibre is coiled with 10 turns on 15 mm radius mandrel

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Optical Fibre Cable	Variant-12: Optical Fibre Cable- Outdoor	 (v) Change in attenuation when fibre is coiled with 1 turn on 10 mm radius mandrel (vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel (vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel. 	TEC ER No. TEC70022110
		Peak Stripability force to remove Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32	TEC ER No. TEC70022110
		Fiber Curl as per IEC 60793-2-50, IEC 60793-1-34	TEC ER No. TEC70022110

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Telecom **Test Parameter or Type of Testing** Standard/ SI. No. Equipment/ Specification Product Attenuation as per IEC-60793-1-40 **Optical Fibre** Variant-13: TEC ER No. TEC70022110 (i) at 1310nm Cable **Optical Fibre** (ii) at 1383nm Cable- Riser (iii) at 1490 nm (iv) at 1550nm (v) at 1625nm TEC ER No. PMD as per IEC 60793-1-48 (a) Cabled Loose Fibre TEC70022110 (b) Cabled Ribbon Fibre Cable Cut-off wavelength as per TEC ER No. IEC 60793-1-44 TEC70022110 Tensile Strength as per TEC ER No. IEC 60793-1-21 TEC70022110 Crush Resistance as per TEC ER No.

> IEC 60793-1-21 Impact Test as per

IEC 60793-1-21 Kink Test as per

IEC C 60794-1-21

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TEC70022110

TEC ER No. TEC70022110

TEC ER No. TEC70022110

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 Product
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Optical Fibre Cable	Variant-13: Optical Fibre	Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
	Cable- Riser	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Torsion Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Abrasion Resistance Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		Temperature Cycling as per IEC 60794-1-22	TEC ER No. TEC70022110
		Cable Aging test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Check of the effect of aggression media on the cable as per ISO 175	TEC ER No. TEC70022110
		Cable Material Compatibility as per Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110

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SI. No.	Telecom Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
	Optical Fibre Cable	Variant-13: Optical Fibre	Kink resistance Test as per IEC 60794-1-23	TEC ER No. TEC70022110
		Cable- Riser	Drainage Test/Compound Flow as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
			Water tightness / Water Blocking test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Strippability Test -Tight Buffer as per IEC 60794-3, IEC 60793-1-32, IEC 60793-1-32:2010	TEC ER No. TEC70022110
			Ribbon Dimension as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
			Separability of individual fibres from ribbon as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
			Ribbon Compression Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. Telecom No. Equipment/ Product	Test Parameter	or Type of Testing	Standard/ Specification
Optical Fibre Cable	Variant-13: Optical Fibre Cable- Riser	Ribbon Torsion Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
	Cable- Riser	Ribbon Micro-bend as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
		Ribbon Stripability Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
		Mode Field Diameter at 1310 nm/1550 nm as per IEC60793-1-45	TEC ER No. TEC70022110
		Cladding Diameter as per IEC 60793-1-20	TEC ER No. TEC70022110
		Cladding Non-Circularity as per IEC 60793-1-20	TEC ER No. TEC70022110
		Core Clad Concentricity error IEC 60793-1-20	TEC ER No. TEC70022110

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SCOPE OF DESIGNATION (ANNEXURE)

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SI. No.	Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-13: Optical Fibre	Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
		Cable- Riser	Coating /Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
			Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110 TEC ER No. TEC70022110
			Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
			Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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SI. Telecom Test Parameter or Type of Testing Standard/ No. Equipment/ Specification Product **Optical Fibre** Variant-13: Fibre Macro bend loss as per ITU-T TEC ER No. TEC70022110 Cable **Optical Fibre** G.65x .ITU-T G.650.1, IEC 60793-

	Cable- Riser	2-50 and IEC 60793-1-47:
		(i) Change in attenuation when fibre
		is coiled with 100 turns on 60 ±1.0 mm diameter mandrel
		(ii) Change in attenuation when fibre
		is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel
		(iii) Change in attenuation when
		fibre is coiled with 100 turns on 50 ±0.5 mm diameter mandrel
		(iv) Change in attenuation when fibre
		is coiled with 10 turns on 15 mm radius mandrel

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Sl. Telecom No. Equipment/ Product	Test Parameter	Parameter or Type of Testing	
Optical Fibre Cable	Variant-13: Optical Fibre Cable- Riser	 (v) Change in attenuation when fibre is coiled with 1 turn on 10 mm radius mandrel (vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel (vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel. 	TEC ER No. TEC70022110
		Peak Stripability force to remove Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32	TEC ER No. TEC70022110
		Fiber Curl as per IEC 60793-2-50, IEC 60793-1-34	TEC ER No. TEC70022110
		Flame Spread-Single cable as per IEC/EN 60332-1-2	TEC ER No. TEC70022110
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SI. No.	Telecom Equipment/ Product Optical Fibre Cable	Test Parameter or Type of Testing		Standard/ Specification
		Variant-14: Optical Ground Wire - OPGW	Attenuation as per IEC-60793-1-40 (i) at 1310nm (ii) at 1383nm (iii) at 1490 nm (iv) at 1550nm (v) at 1625nm	TEC ER No. TEC70022110
			PMD as per IEC 60793-1-48 (a) Cabled Loose Fibre (b) Cabled Ribbon Fibre	TEC ER No. TEC70022110
			Cable Cut-off wavelength as per IEC 60793-1-44	TEC ER No. TEC70022110
			Tensile Strength as per IEC 60793-1-21	TEC ER No. TEC70022110
			Crush Resistance as per IEC 60793-1-21	TEC ER No. TEC70022110
			Impact Test as per IEC 60793-1-21	TEC ER No. TEC70022110
			Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110

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No. H	Felecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
	Optical Fibre Cable	Variant-14: Optical Ground Wire -	Repeated Bend Test as per IEC 60794-1-21	TEC ER No. TEC70022110
		OPGW	Cable drip Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Creep Test as per IEC 60794-4-20	TEC ER No. TEC70022110
			Sheave Test as per IEEE 1138:2009	TEC ER No. TEC70022110
			Stress Strain Test as per IEEE 1138:2009	TEC ER No. TEC70022110
			Strain Margin Test as per IEEE 1138:2009	TEC ER No. TEC70022110
			Temperature Cycling Test as per IEC 60794-1-22	TEC ER No. TEC70022110
			Water Blocking Test as per IEC 60794-1-22	TEC ER No. TEC70022110

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Telecom Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
Optical Fibre Cable	Variant-14: Optical	Cable Material Compatibility Telecordia GR 20, IEC 60794- 3-11	TEC ER No. TEC70022110
	Ground Wire - OPGW	Electrical Continuity Test as per IEC 60794-1-24, IEC 60794- 3-11	TEC ER No. TEC70022110
		Kink resistance Test as per IEC 60794-1-23	TEC ER No. TEC70022110
		Drainage Test/Compound Flow as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
		Water tightness / Water Blocking test as per IEC 60794-1-22	TEC ER No. TEC70022110
		Strippability Test -Tight Buffer as per IEC 60794-3, IEC 60793-1-32, IEC 60793-1-32:2010	TEC ER No. TEC70022110
		Ribbon Dimension as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110
		Separability of individual fibres from ribbon as per IEC 60794-1-23, IEC 60794-3	TEC ER No. TEC70022110

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Sl. Telecom No. Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
Optical Fibre Cable	Variant-14: Optical Ground Wire -	Ribbon Compression Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
	OPGW	Ribbon Torsion Resistance as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
		Ribbon Micro-bend as per IEC 60794-1-31, IEC 60794-3	TEC ER No. TEC70022110
		Ribbon Stripability Test as per IEC 60794-1-21, IEC 60794-3	TEC ER No. TEC70022110
		Mode Field Diameter at 1310 nm/1550 nm as per IEC60793-1-45	TEC ER No. TEC70022110
		Cladding Diameter as per IEC 60793-1-20	TEC ER No. TEC70022110
		Cladding Non-Circularity as per IEC 60793-1-20	TEC ER No. TEC70022110
		Core Clad Concentricity error as per IEC 60793-1-20	TEC ER No. TEC70022110

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Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

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Sl. Telecom No. Equipment/ Product	Test Parameter or Type of Testing		Standard/ Specification
Optical Fibre Cable	Variant-14: Optical	Coating diameter as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
	Ground Wire - OPGW	Coating /Cladding Concentricity as per IEC 60793-1-21, IEC 60793-2-50	TEC ER No. TEC70022110
		Chromatic Dispersion as per IEC 60793-1-42, IEC 60793-2-50 (i) at 1550 nm (ii) at 1625 nm (iii) In 1285-1330 nm band (iv) In 1270-1340 nm band	TEC ER No. TEC70022110
		Zero Dispersion slope as per IEC 60793-1-42	TEC ER No. TEC70022110
		Zero Dispersion wavelength range as per IEC 60793-1-42	TEC ER No. TEC70022110

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Validity: 30/08/2022 to 29/08/2025

SI. Telecom Test Parameter or Type of Testing Standard/ Specification No. Equipment/ Product Variant-14: **Optical Fibre** Fibre Macro bend loss as per ITU-T TEC ER No. TEC70022110 Cable G.65x .ITU-T G.650.1, IEC 60793-Optical Ground Wire -2-50 and IEC 60793-1-47: OPGW (i) Change in attenuation when fibre is coiled with 100 turns on 60 ± 1.0 mm diameter mandrel (ii) Change in attenuation when fibre

is coiled with 1 turn around 32 ± 0.5 mm diameter mandrel (iii) Change in attenuation when fibre is coiled with 100 turns on 50 ±0.5 mm diameter mandrel

> (iv) Change in attenuation when fibre is coiled with 10 turns on 15 mm radius mandrel

Director (CA), TEC

AD (CA), TEC

*The validity of Certificate is up to 29/08/2025 or the continued validity of NABL Accreditation, whichever is earlier.

Last Amended on:



Gate No. 5, Khurshid Lal Bhawan, Janpath, New Delhi - 110 001

SCOPE OF DESIGNATION (ANNEXURE)

Laboratory Name: M/s Sterlite Technologies Ltd. (OFC Quality Assurance Laboratory) Survey No. 68/1, Madhuban Dham Road, Rakholi, Silvasa- 396 230, U. T. of Dadra and Nagar Haveli

Certificate Number: TEC/MRA/CAB/IND-D/83

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Validity: 30/08/2022 to 29/08/2025

Test Parameter or Type of Testing Standard/ Telecom SL. No. Equipment/ Specification Product **Optical Fibre** Variant-14: (v) Change in attenuation when fibre TEC ER No. TEC70022110 Cable is coiled with 1 turn on 10 mm Optical radius mandrel Ground Wire -OPGW (vi) Change in attenuation when fibre is coiled with 1 turn on 7.5 mm radius mandrel (vii) Change in attenuation when fibre is coiled with 1 turn on 5 mm radius mandrel. Peak Stripability force to remove TEC ER No. TEC70022110 Primary coating of the fiber (Unaged, Water aged, Damp Heat aged) as per IEC 60793-2-50, IEC60793-1-32

 Fiber Curl as per
 TEC ER No.

 IEC 60793-2-50, IEC 60793-1-34
 TEC70022110

Director (CA), TEC

AD (CA), TEC

*The validity of Certificate is up to 29/08/2025 or the continued validity of NABL Accreditation, whichever is earlier.

Last Amended on: ____