

CS-8F-250-EMEA

LightScope ZWP® Singlemode Fiber



Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.7 µm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	249 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±13 µm
Coating Diameter Tolerance (Uncolored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm
Proof Test	689.476 N/mm ² 100000 psi

Dimensions

Fiber Curl, minimum	4 m 13.123 ft
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Mechanical Specifications

Macrobending, 20 mm Ø mandrel, 1 turn	0.75 dB @ 1,550 nm 1.50 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.25 dB @ 1,550 nm 1.00 dB @ 1,625 nm
Macrobending, 60 mm Ø mandrel, 100 turns	0.05 dB @ 1,550 nm 0.05 dB @ 1,625 nm
Coating Strip Force, maximum	8.9 N 2.001 lbf
Coating Strip Force, minimum	1.3 N 0.292 lbf

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Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum 1250 nm

Point Defects, maximum 0.05 dB

Zero Dispersion Slope, maximum 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum 1324 nm

Zero Dispersion Wavelength, minimum 1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.21 dB/km @ 1,550 nm | 0.24 dB/km @ 1625 nm | 0.25 dB/km @ 1,490 nm | 0.35 dB/km @ 1,310 nm | 0.35 dB/km @ 1,385 nm

Dispersion, maximum 18 ps(nm-km) at 1550 nm | 2.2 ps(nm-km) at 1625 nm | 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm

Index of Refraction 1.467 @ 1,310 nm | 1.468 @ 1,550 nm

Mode Field Diameter 10.4 μm @ 1,550 nm | 9.2 μm @ 1,310 nm

Mode Field Diameter Tolerance $\pm 0.4 \mu\text{m}$ @ 1310 nm | $\pm 0.5 \mu\text{m}$ @ 1550 nm

Polarization Mode Dispersion Link Design Value, maximum 0.06 ps/sqrt(km)

Standards Compliance ITU-T G.652.D | ITU-T G.657.A1

Environmental Specifications

Heat Aging, maximum 0.05 dB/km @ 85 °C

Temperature Dependence, maximum 0.05 dB/km

Temperature Humidity Cycling, maximum 0.05 dB/km

Water Immersion, maximum 0.05 dB/km @ 23 °C

* Footnotes

Temperature Dependence, maximum Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

Temperature Humidity Cycling, maximum Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity