

Fiber OSP cable, LightScope ZWP® Blown Micro Single Jacket All-Dielectric, 96 fiber, Stranded Loose Tube Arid-Core® Construction, Gel-filled, Singlemode G.657.A1, Meters jacket marking, Black jacket color

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber OSP cable
<b>Product Series</b>	B-LN

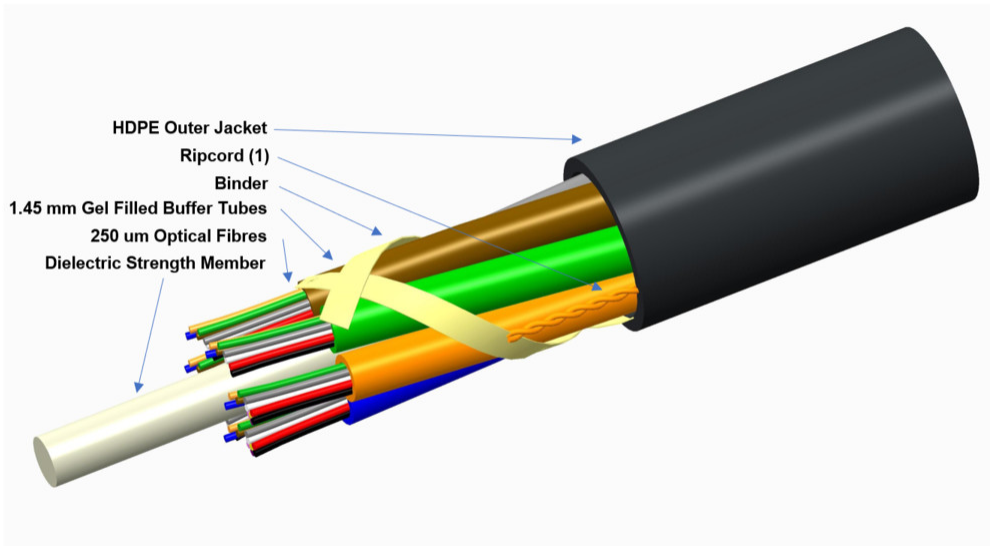
## General Specifications

<b>Cable Type</b>	Stranded loose tube
<b>Construction Type</b>	Non-armored
<b>Subunit Type</b>	Gel-filled
<b>Filler, quantity</b>	0
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Meters
<b>Jacket Marking Method</b>	Laser
<b>Jacket Marking Text</b>	COMMSCOPE OPTICAL CABLE G657A1 SM 96F (SERIAL NUMBER) MM/YYYY XXXXXXXXM
<b>Subunit, quantity</b>	8
<b>Fibers per Subunit, quantity</b>	12
<b>Total Fiber Count</b>	96

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	1.45 mm   0.057 in
<b>Diameter Over Jacket</b>	6.5 mm   0.256 in

## Representative Image



## Material Specifications

**Jacket Material** High density polyethylene (HDPE)

## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	98 mm   3.858 in
<b>Minimum Bend Radius, unloaded</b>	65 mm   2.559 in
<b>Tensile Load, long term, maximum</b>	267 N   60.024 lbf
<b>Tensile Load, short term, maximum</b>	890 N   200.08 lbf
<b>Compression</b>	10 N/mm   57.101 lb/in
<b>Compression Test Method</b>	IEC 60794-1-21 E3
<b>Flex</b>	25 cycles
<b>Flex Test Method</b>	IEC 60794-1 E6
<b>Impact</b>	0.3 N-m   2.655 in lb
<b>Impact Test Method</b>	IEC 60794-1-21 E4
<b>Strain</b>	See long and short term tensile loads
<b>Strain Test Method</b>	IEC 60794-1-21 E1
<b>Twist</b>	10 cycles
<b>Twist Test Method</b>	IEC 60794-1-21 E7
<b>Vertical Rise, maximum</b>	752 m   2,467.192 ft

## Optical Specifications

**Fiber Type** G.657.A1

## Environmental Specifications

<b>Installation temperature</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Operating Temperature</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Storage Temperature</b>	-30 °C to +75 °C (-22 °F to +167 °F)
<b>Cable Qualification Standards</b>	IEC 60794-5-10
<b>Environmental Space</b>	Air-blown, microduct
<b>Jacket UV Resistance</b>	UV stabilized
<b>Water Penetration</b>	24 h
<b>Water Penetration Test Method</b>	IEC 60794-1 F4

## Environmental Test Specifications

<b>Cable Freeze</b>	-2 °C   28.4 °F
<b>Cable Freeze Test Method</b>	IEC 60794-1 F15
<b>Drip</b>	70 °C   158 °F
<b>Drip Test Method</b>	IEC 60794-1-21 E14
<b>Heat Age</b>	-30 °C to +85 °C (-22 °F to +185 °F)
<b>Heat Age Test Method</b>	IEC 60794-1-22 F9
<b>Low High Bend</b>	-30 °C to +60 °C (-22 °F to +140 °F)
<b>Low High Bend Test Method</b>	IEC 60794-1-21 E11
<b>Temperature Cycle</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Temperature Cycle Test Method</b>	IEC 60794-1-22 F1

## Packaging and Weights

**Cable weight** 38 kg/km | 25.535 lb/kft

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

CS-8F-250-EMEA – LightScope ZWP® Singlemode Fiber

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

## LightScope ZWP® Singlemode Fiber



### Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

### General Specifications

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

### Dimensions

<b>Fiber Curl, minimum</b>	4 m   13.123 ft
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### Mechanical Specifications

<b>Macrobending, 20 mm Ø mandrel, 1 turn</b>	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
<b>Macrobending, 30 mm Ø mandrel, 10 turns</b>	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
<b>Macrobending, 60 mm Ø mandrel, 100 turns</b>	0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	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  $\mu\text{m}$  @ 1,550 nm | 9.2  $\mu\text{m}$  @ 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