

Fiber indoor cable, LazrSPEED® Riser Distribution, 6-Fiber Single-Unit, Multimode OM4, Feet jacket marking, Aqua jacket color

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | Latin America | Middle East/Africa | North

America

Portfolio CommScope®

**Product Type** Fiber indoor cable

**Product Series** R-DS

General Specifications

Cable Type Distribution

Construction Type Non-armored

**Subunit Type** Gel-free

Jacket Color Aqua

Jacket Marking Feet

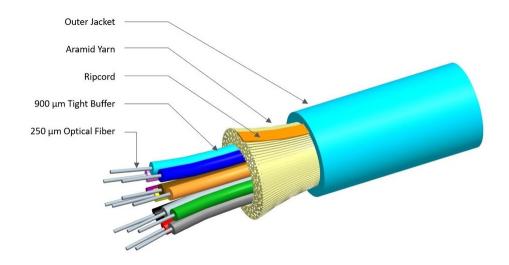
**Total Fiber Count** 6

**Dimensions** 

**Diameter Over Jacket** 5.04 mm | 0.198 in

Representative Image





## Mechanical Specifications

Minimum Bend Radius, loaded76 mm | 2.992 inMinimum Bend Radius, unloaded50 mm | 1.969 inTensile Load, long term, maximum200 N | 44.962 lbfTensile Load, short term, maximum667 N | 149.948 lbf

 Compression
 10 N/mm | 57.101 lb/in

 Compression Test Method
 FOTP-41 | IEC 60794-1 E3

Flex 100 cycles

 Flex Test Method
 FOTP-104 | IEC 60794-1 E6

 Impact
 2.94 N-m | 26.021 in lb

Impact Test Method FOTP-25 | IEC 60794-1 E4

**Strain** See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

**Vertical Rise, maximum** 500 m | 1,640.42 ft

Optical Specifications

Fiber Type OM4, LazrSPEED® 550 | OM4, LazrSPEED® 550



### Environmental Specifications

Installation temperature  $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

Operating Temperature  $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

Storage Temperature -40 °C to +70 °C (-40 °F to +158 °F)

Cable Qualification Standards ANSI/ICEA S-83-596 | Telcordia GR-409

Environmental Space Riser

Flame Test Listing NEC OFNR (ETL) and c(ETL)

Flame Test Method UL 1666

### **Environmental Test Specifications**

**Heat Age** -20 °C to +85 °C (-4 °F to +185 °F)

**Heat Age Test Method** IEC 60794-1 F9

**Low High Bend**  $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

**Low High Bend Test Method** FOTP-37 | IEC 60794-1 E11

**Temperature Cycle**  $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

**Temperature Cycle Test Method** FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 23 kg/km | 15.455 lb/kft

# Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Below maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



#### Included Products

CS-5K-TB – LazrSPEED® 550 OM4 Bend-Insensitive Multimode

Fiber

\* Footnotes



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

#### LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

## LazrSPEED® 550

#### **Product Classification**

PortfolioCommScope®Product TypeOptical fiber

### General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±0.8 µm Cladding Non-Circularity, maximum 1 % **Coating Diameter (Colored)** 254 µm **Coating Diameter (Uncolored)** 245 µm **Coating Diameter Tolerance (Colored)** ±7 µm **Coating Diameter Tolerance (Uncolored)** ±10 μm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 50 µm **Core Diameter Tolerance** ±2.5 µm Core/Clad Offset, maximum  $1.5 \, \mu m$ 

**Proof Test** 689.476 N/mm<sup>2</sup> | 100000 psi

Tight Buffer Diameter 900  $\mu m$ Tight Buffer Diameter Tolerance  $\pm 40 \ \mu m$ 

## Mechanical Specifications

 Macrobending, 15 mm Ø mandrel, 2 turns
 0.20 dB @ 850 nm | 0.50 dB @ 1,300 nm

 Macrobending, 30 mm Ø mandrel, 2 turns
 0.10 dB @ 850 nm | 0.30 dB @ 1,300 nm

 Macrobending, 75 mm Ø mandrel, 100 turns
 0.50 dB @ 1,300 nm | 0.50 dB @ 850 nm

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

**Dynamic Fatigue Parameter, minimum** 18

COMMSCOPE®

# CS-5K-TB

### **Optical Specifications**

Numerical Aperture 0.2

Numerical Aperture Tolerance±0.015Point Defects, maximum0.15 dB

**Zero Dispersion Slope, maximum** 0.105 ps/[km-nm-nm]

**Zero Dispersion Wavelength, maximum** 1316 nm **Zero Dispersion Wavelength, minimum** 1297 nm

#### Optical Specifications, Wavelength Specific

**1 Gbps Ethernet Distance** 1,110 m @ 850 nm | 600 m @ 1,300 nm

**10 Gbps Ethernet Distance** 550 m @ 850 nm

**Attenuation, maximum** 1.00 dB/km @ 1,300 nm | 3.00 dB/km @ 850 nm

**Backscatter Coefficient** -68.0 dB @ 850 nm | -75.7 dB @ 1,300 nm

 Bandwidth, Laser, minimum
 4,700 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

 Bandwidth, OFL, minimum
 3,500 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

**Differential Mode Delay** 0.70 ps/m @ 850 nm

Differential Mode Delay Note Superior to ANSI/TIA TIA-492AAAF and IEC 60793-2-10 at 850 nm

**Index of Refraction** 1.479 @ 1,300 nm | 1.483 @ 850 nm

**Standards Compliance** ANSI/TIA-492AAAF (OM4) | IEC 60793-2-10, A1 (OM4)

# **Environmental Specifications**

**Heat Aging, maximum** 0.20 dB/km @ 85 °C

Temperature Dependence, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 dB/km

**Water Immersion, maximum** 0.20 dB/km @ 23 °C

### Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

#### \* 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)

Page 6 of 7



# CS-5K-TB

up to 95% relative humidity

