

Fiber indoor/outdoor cable, LazrSPEED®, Single Jacket All-Dielectric, Low Smoke Zero Halogen (LSZH), 48 fiber, Multimode OM5, Gel-Free, Stranded Loose Tube, Black jacket color, Feet jacket marking, Cca flame rating. Provides Rodent Resistance

### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North

America

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Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-LN

General Specifications

Cable Type Stranded loose tube

Construction Type Non-armored

Subunit Type Gel-free

Filler, quantity

Jacket Color Black

Jacket Marking Feet

Fibers per Subunit, quantity 12

Total Fiber Count 48

**Dimensions** 

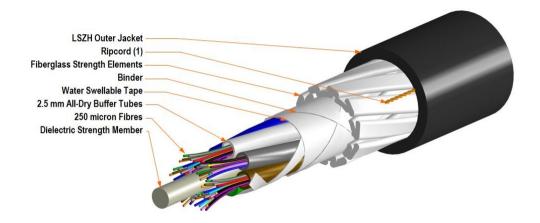
Subunit, quantity

**Buffer Tube/Subunit Diameter** 2.5 mm | 0.098 in

**Diameter Over Jacket** 13.61 mm | 0.536 in

Representative Image





### Mechanical Specifications

Minimum Bend Radius, loaded204 mm| 8.031 inMinimum Bend Radius, unloaded136 mm| 5.354 inTensile Load, long term, maximum1334 N| 299.895 lbfTensile Load, short term, maximum4448 N| 999.95 lbf

 Compression
 22 N/mm | 125.623 lb/in

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

Flex 25 cycles

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

**Impact** 4.41 N-m | 39.032 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** 654 m | 2,145.669 ft

**Optical Specifications** 

Fiber Type OM5, LazrSPEED® wideband | OM5, LazrSPEED® wideband

## **Environmental Specifications**

Installation temperature  $-30 \,^{\circ}\text{C}$  to  $+55 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to  $+131 \,^{\circ}\text{F}$ )

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

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**Storage Temperature**  $-40 \,^{\circ}\text{C}$  to  $+65 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+149 \,^{\circ}\text{F}$ )

Cable Qualification Standards ANSI/ICEA S-104-696 | EN 187105 | Telcordia GR-20 | Telcordia GR-

409

EN50575 CPR Cable EuroClass Fire PerformanceCcaEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Aerial, lashed | Buried | Low Smoke Zero Halogen (LSZH)

Flame Test Method | IEC 60332-1 | IEC 60754-2 | IEC 61034-2

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method FOTP-82 | IEC 60794-1 F5

**Environmental Test Specifications** 

**Cable Freeze** -2 °C | 28.4 °F

Cable Freeze Test Method FOTP-98 | IEC 60794-1 F15

Heat Age -40 °C to +85 °C (-40 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

**Low High Bend**  $-30 \,^{\circ}\text{C}$  to  $+55 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to  $+131 \,^{\circ}\text{F}$ )

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

Temperature Cycle -40 °C to +60 °C (-40 °F to +140 °F)

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

Packaging and Weights

**Cable weight** 194 kg/km | 130.362 lb/kft

# Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

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

CENELEC

#### Included Products

CS-5G-LT - LazrSPEED® OM5 WideBand Multimode

Fiber



# \* Footnotes

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

#### LazrSPEED® OM5 WideBand Multimode Fiber

# LazrSPEED® 550

### Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±5 µm Cladding Non-Circularity, maximum 0.7 % **Coating Diameter (Colored)** 254 µm **Coating Diameter (Uncolored)** 242 µm **Coating Diameter Tolerance (Colored)** ±7 µm **Coating Diameter Tolerance (Uncolored)** ±5 µm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 50 µm **Core Diameter Tolerance** ±2.5 µm

**Proof Tensile Stress** 100,000 psi (0.69 GPa)

Mechanical Specifications

Core/Clad Offset, maximum

 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

1 µm

Coating Strip Force, maximum $4.5 \, \text{N}$  |  $1.012 \, \text{lbf}$ Coating Strip Force, minimum $0.9 \, \text{N}$  |  $0.202 \, \text{lbf}$ 

**Dynamic Fatigue Parameter, minimum** 18

Optical Specifications

Numerical Aperture 0.2

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# CS-5G-LT

Numerical Aperture Tolerance ±0.010

Point Defects, maximum 0.15 dB

**Zero Dispersion Slope, maximum (0M5)** -412/(840(1-(λ0/840)^4)) ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1328 nmZero Dispersion Wavelength, minimum1297 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 | 2.20 dB/km @ 953 nm | 3.00 dB/km @

850 nm

**Bandwidth, Laser, minimum** 2,600 MHz-km @ 953 nm | 4,700 MHz-km @ 850 nm | 500 MHz-km

@ 1,300 nm

**Bandwidth, OFL, minimum** 1,950 MHz-km @ 953 nm | 3,500 MHz-km @ 850 nm | 500 MHz-km

@ 1,300 nm

**Index of Refraction** 1.478 @ 1,300 nm | 1.483 @ 850 nm

**Standards Compliance** ANSI/TIA-492AAAF (OM5) | ANSI/TIA-568.3 (OM5) | IEC 60793-2-10,

A1 (OM5) | ISO/IEC 11801-1 cabled optical fiber performance category

OM5

# **Environmental Specifications**

**Heat Aging, maximum** 0.10 dB/km @ 85 °C

Temperature Dependence, maximum 0.1 dB/km
Temperature Humidity Cycling, maximum 0.1 dB/km

Water Immersion, maximum 0.10 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)

up to 95% relative humidity

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