



Fiber indoor/outdoor cable, LazrSPEED®, Single Jacket All-Dielectric, Low Smoke Zero Halogen (LSZH), 24 fiber, Multimode OM5, Gel-Free, Stranded Loose Tube, Feet jacket marking, Black jacket color, B2ca flame rating

**OBSOLETE**

## Product Classification

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

## General Specifications

|                                     |                     |
|-------------------------------------|---------------------|
| <b>Cable Type</b>                   | Stranded loose tube |
| <b>Construction Type</b>            | Non-armored         |
| <b>Subunit Type</b>                 | Gel-free            |
| <b>Filler, quantity</b>             | 3                   |
| <b>Jacket Color</b>                 | Black               |
| <b>Jacket Marking</b>               | Feet                |
| <b>Subunit, quantity</b>            | 2                   |
| <b>Fibers per Subunit, quantity</b> | 12                  |
| <b>Total Fiber Count</b>            | 24                  |

## Dimensions

|                                     |                    |
|-------------------------------------|--------------------|
| <b>Buffer Tube/Subunit Diameter</b> | 2.5 mm   0.098 in  |
| <b>Diameter Over Jacket</b>         | 11.7 mm   0.461 in |

## Representative Image



## Mechanical Specifications

|  |                                       |
|--|---------------------------------------|
| <b>Minimum Bend Radius, loaded</b>       | 175 mm   6.89 in                      |
| <b>Minimum Bend Radius, unloaded</b>     | 117 mm   4.606 in                     |
| <b>Tensile Load, long term, maximum</b>  | 800 N   179.847 lbf                   |
| <b>Tensile Load, short term, maximum</b> | 2700 N   606.984 lbf                  |
| <b>Compression</b>                       | 22 N/mm   125.623 lb/in               |
| <b>Compression Test Method</b>           | FOTP-41   IEC 60794-1 E3              |
| <b>Flex</b>                              | 25 cycles                             |
| <b>Flex Test Method</b>                  | FOTP-104   IEC 60794-1 E6             |
| <b>Impact</b>                            | 3 N-m   26.552 in lb                  |
| <b>Impact Test Method</b>                | FOTP-25   IEC 60794-1 E4              |
| <b>Strain</b>                            | See long and short term tensile loads |
| <b>Strain Test Method</b>                | FOTP-33   IEC 60794-1 E1              |
| <b>Twist</b>                             | 10 cycles                             |
| <b>Twist Test Method</b>                 | FOTP-85   IEC 60794-1 E7              |
| <b>Vertical Rise, maximum</b>            | 654 m   2,145.669 ft                  |

## Optical Specifications

|                   |   |
|-------------------|---|
| <b>Fiber Type</b> | OM5, LazrSPEED® wideband   OM5, LazrSPEED® wideband |
|-------------------|---|

## Environmental Specifications

|                                 |                                      |
|---------------------------------|--------------------------------------|
| <b>Installation temperature</b> | -30 °C to +55 °C (-22 °F to +131 °F) |
| <b>Operating Temperature</b>    | -40 °C to +60 °C (-40 °F to +140 °F) |

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|   |  |
|---|--|
| <b>Storage Temperature</b>                          | -40 °C to +65 °C (-40 °F to +149 °F)                                 |
| <b>Cable Qualification Standards</b>                | ANSI/ICEA S-104-696   EN 187105   Telcordia GR-20   Telcordia GR-409 |
| <b>EN50575 CPR Cable EuroClass Fire Performance</b> | B2ca   |
| <b>EN50575 CPR Cable EuroClass Smoke Rating</b>     | s1a  |
| <b>EN50575 CPR Cable EuroClass Droplets Rating</b>  | d0   |
| <b>EN50575 CPR Cable EuroClass Acidity Rating</b>   | a1   |
| <b>Environmental Space</b>                          | Aerial, lashed   Buried   Low Smoke Zero Halogen (LSZH)              |
| <b>Flame Test Method</b>                            | IEC 60332-1   IEC 60754-2   IEC 61034-2                              |
| <b>Jacket UV Resistance</b>                         | UV stabilized  |
| <b>Water Penetration</b>                            | 24 h   |
| <b>Water Penetration Test Method</b>                | FOTP-82   IEC 60794-1 F5   |

## Environmental Test Specifications

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| <b>Cable Freeze</b>                  | -2 °C   28.4 °F                      |
| <b>Cable Freeze Test Method</b>      | FOTP-98   IEC 60794-1 F15            |
| <b>Heat Age</b>                      | -40 °C to +85 °C (-40 °F to +185 °F) |
| <b>Heat Age Test Method</b>          | IEC 60794-1 F9                       |
| <b>Low High Bend</b>                 | -30 °C to +55 °C (-22 °F to +131 °F) |
| <b>Low High Bend Test Method</b>     | FOTP-37   IEC 60794-1 E11            |
| <b>Temperature Cycle</b>             | -40 °C to +60 °C (-40 °F to +140 °F) |
| <b>Temperature Cycle Test Method</b> | FOTP-3   IEC 60794-1 F1              |

## Packaging and Weights

|                     |                           |
|---------------------|---------------------------|
| <b>Cable weight</b> | 125 kg/km   83.996 lb/kft |
|---------------------|---------------------------|

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| CENELEC       | EN 50575 compliant, Declaration of Performance (DoP) available                 |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |



## 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

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

#### General Specifications

|  |  |
|--|--|
| <b>Cladding Diameter</b>                             | 125 µm                                 |
| <b>Cladding Diameter Tolerance</b>                   | ±0.8 µm                                |
| <b>Cladding Non-Circularity, maximum</b>             | 0.7 %                                  |
| <b>Coating Diameter (Colored)</b>                    | 254 µm                                 |
| <b>Coating Diameter (Uncolored)</b>                  | 242 µm                                 |
| <b>Coating Diameter Tolerance (Colored)</b>          | ±7 µm                                  |
| <b>Coating Diameter Tolerance (Uncolored)</b>        | ±5 µm                                  |
| <b>Coating/Cladding Concentricity Error, maximum</b> | 12 µm                                  |
| <b>Core Diameter</b>                                 | 50 µm                                  |
| <b>Core Diameter Tolerance</b>                       | ±2.5 µm                                |
| <b>Core/Clad Offset, maximum</b>                     | 1 µm                                   |
| <b>Proof Test</b>                                    | 689.476 N/mm <sup>2</sup>   100000 psi |

#### Mechanical Specifications

|   |                                       |
|---|---------------------------------------|
| <b>Macrobending, 15 mm Ø mandrel, 2 turns</b>   | 0.20 dB @ 850 nm   0.50 dB @ 1,300 nm |
| <b>Macrobending, 30 mm Ø mandrel, 2 turns</b>   | 0.10 dB @ 850 nm   0.30 dB @ 1,300 nm |
| <b>Macrobending, 75 mm Ø mandrel, 100 turns</b> | 0.50 dB @ 1,300 nm   0.50 dB @ 850 nm |
| <b>Coating Strip Force, maximum</b>             | 4.5 N   1.012 lbf                     |
| <b>Coating Strip Force, minimum</b>             | 0.9 N   0.202 lbf                     |
| <b>Dynamic Fatigue Parameter, minimum</b>       | 18                                    |

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## Optical Specifications

|   |   |
|---|---|
| <b>Numerical Aperture</b>                   | 0.2   |
| <b>Numerical Aperture Tolerance</b>         | ±0.010  |
| <b>Point Defects, maximum</b>               | 0.15 dB   |
| <b>Zero Dispersion Slope, maximum (OM5)</b> | $-412/(840(1-(\lambda_0/840)^4))$ ps/[km-nm-nm] |
| <b>Zero Dispersion Wavelength, maximum</b>  | 1328 nm   |
| <b>Zero Dispersion Wavelength, minimum</b>  | 1297 nm   |

## Optical Specifications, Wavelength Specific

|                                  |  |
|----------------------------------|--|
| <b>1 Gbps Ethernet Distance</b>  | 1,110 m @ 850 nm   600 m @ 1,300 nm  |
| <b>10 Gbps Ethernet Distance</b> | 550 m @ 850 nm   |
| <b>Attenuation, maximum</b>      | 1.00 dB/km @ 1,300 nm   2.20 dB/km @ 953 nm   3.00 dB/km @ 850 nm  |
| <b>Bandwidth, Laser, minimum</b> | 2,600 MHz-km @ 953 nm   4,700 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm  |
| <b>Bandwidth, OFL, minimum</b>   | 1,950 MHz-km @ 953 nm   3,500 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm  |
| <b>Index of Refraction</b>       | 1.478 @ 1,300 nm   1.483 @ 850 nm  |
| <b>Standards Compliance</b>      | ANSI/TIA-568.3-D wideband multimode fiber cable   IEC 60793-2-10, edition 6, model A1a.4   ISO 11801-1 cabled optical fiber performance category OM5   TIA-492AAAE (OM5) |

## Environmental Specifications

|  |                    |
|--|--------------------|
| <b>Heat Aging, maximum</b>                   | 0.10 dB/km @ 85 °C |
| <b>Temperature Dependence, maximum</b>       | 0.1 dB/km          |
| <b>Temperature Humidity Cycling, maximum</b> | 0.1 dB/km          |
| <b>Water Immersion, maximum</b>              | 0.10 dB/km @ 23 °C |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |



## \* Footnotes

# CS-5G-LT

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**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