



Fiber indoor cable, LazrSPEED® Riser Distribution, 2-Fiber Single-Unit, Multimode OM5, Feet jacket marking, Lime green jacket color

## Product Classification

|                              |   |
|------------------------------|---|
| <b>Regional Availability</b> | Asia   Australia/New Zealand   Latin America   Middle East/Africa   North America |
| <b>Portfolio</b>             | CommScope®  |
| <b>Product Type</b>          | Fiber indoor cable  |
| <b>Product Series</b>        | R-DS  |

## General Specifications

|                          |              |
|--------------------------|--------------|
| <b>Cable Type</b>        | Distribution |
| <b>Construction Type</b> | Non-armored  |
| <b>Subunit Type</b>      | Gel-free     |
| <b>Jacket Color</b>      | Lime green   |
| <b>Jacket Marking</b>    | Feet         |
| <b>Total Fiber Count</b> | 2            |

## Dimensions

|                             |                    |
|-----------------------------|--------------------|
| <b>Diameter Over Jacket</b> | 3.91 mm   0.154 in |
|-----------------------------|--------------------|

## Representative Image



## Mechanical Specifications

|  |                                       |
|--|---------------------------------------|
| <b>Minimum Bend Radius, loaded</b>       | 59 mm   2.323 in                      |
| <b>Minimum Bend Radius, unloaded</b>     | 39 mm   1.535 in                      |
| <b>Tensile Load, long term, maximum</b>  | 200 N   44.962 lbf                    |
| <b>Tensile Load, short term, maximum</b> | 667 N   149.948 lbf                   |
| <b>Compression</b>                       | 10 N/mm   57.101 lb/in                |
| <b>Compression Test Method</b>           | FOTP-41   IEC 60794-1 E3              |
| <b>Flex</b>                              | 100 cycles                            |
| <b>Flex Test Method</b>                  | FOTP-104   IEC 60794-1 E6             |
| <b>Impact</b>                            | 5.88 N-m   52.042 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>            | 500 m   1,640.42 ft                   |

## Optical Specifications

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

## Environmental Specifications

|                                 |                                     |
|---------------------------------|-------------------------------------|
| <b>Installation temperature</b> | -20 °C to +70 °C (-4 °F to +158 °F) |
| <b>Operating Temperature</b>    | -20 °C to +70 °C (-4 °F to +158 °F) |

# 760229708 | R-002-DS-5G-FSULM

---

|                                      |                                       |
|--------------------------------------|---------------------------------------|
| <b>Storage Temperature</b>           | -40 °C to +70 °C (-40 °F to +158 °F)  |
| <b>Cable Qualification Standards</b> | ANSI/ICEA S-83-596   Telcordia GR-409 |
| <b>Environmental Space</b>           | Riser                                 |
| <b>Flame Test Listing</b>            | NEC OFNR (ETL) and c(ETL)             |
| <b>Flame Test Method</b>             | UL 1666                               |

## Environmental Test Specifications

|                                      |                                     |
|--------------------------------------|-------------------------------------|
| <b>Heat Age</b>                      | -20 °C to +85 °C (-4 °F to +185 °F) |
| <b>Heat Age Test Method</b>          | IEC 60794-1 F9                      |
| <b>Low High Bend</b>                 | -20 °C to +70 °C (-4 °F to +158 °F) |
| <b>Low High Bend Test Method</b>     | FOTP-37   IEC 60794-1 E11           |
| <b>Temperature Cycle</b>             | -20 °C to +70 °C (-4 °F to +158 °F) |
| <b>Temperature Cycle Test Method</b> | FOTP-3   IEC 60794-1 F1             |

## Packaging and Weights

|                     |                         |
|---------------------|-------------------------|
| <b>Cable weight</b> | 13 kg/km   8.736 lb/kft |
|---------------------|-------------------------|

## Regulatory Compliance/Certifications

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

## Included Products

|          |   |
|----------|---|
| CS-5G-TB | - LazrSPEED® OM5 WideBand Multimode Fiber |
|----------|---|

## \* Footnotes

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

## LazrSPEED® OM5 WideBand Multimode Fiber

# LazrSPEED®

### 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 |
| <b>Tight Buffer Diameter</b>                         | 900 µm                                 |
| <b>Tight Buffer Diameter Tolerance</b>               | ±40 µm                                 |

### 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                     |

# CS-5G-TB

|   |                   |
|---|-------------------|
| <b>Coating Strip Force, minimum</b>       | 0.9 N   0.202 lbf |
| <b>Dynamic Fatigue Parameter, minimum</b> | 18                |

## 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-(λ0/840)^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-TB

---

|  |   |
|--|---|
| <b>Temperature Dependence, maximum</b>       | Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)                                   |
| <b>Temperature Humidity Cycling, maximum</b> | Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity |