

# 8-1592139-9 | C-004-DS-5L-MSUTQ/GY/C



Indoor/outdoor Fiber Optic Cable, 4-fiber, office distribution, multimode, OM3, ULSZH, aqua. Provides Rodent Resistance.

- designed to offer flexibility, strength and compact construction for internal and interbuilding use
- non-metallic construction reinforced by E-glass yarns, which provide rodent resistance and higher tensile strength
- oversheathed with a ULSZH jacket meeting IEC fire performance requirements

## Product Classification

|                              |                            |
|------------------------------|----------------------------|
| <b>Regional Availability</b> | Asia   EMEA                |
| <b>Portfolio</b>             | CommScope®                 |
| <b>Product Type</b>          | Fiber indoor/outdoor cable |
| <b>Product Series</b>        | C-DS                       |

## General Specifications

|                                     |  |
|-------------------------------------|--|
| <b>Cable Type</b>                   | Tight buffer   |
| <b>Jacket Color</b>                 | Aqua   |
| <b>Jacket Marking</b>               | Meters   |
| <b>Jacket Marking Method</b>        | Inkjet   |
| <b>Jacket Marking Text</b>          | COMMSCOPE GB OPTICAL CABLE 8-1592139-9 4x50/125 OM3 EN50575 CLASS C BIMMF ULSZH [Serial NUMBER] [METRE MARK] |
| <b>Strength Members</b>             | E-glass yarns  |
| <b>Fibers per Subunit, quantity</b> | 4  |
| <b>Total Fiber Count</b>            | 4  |

## Dimensions

|                             |                   |
|-----------------------------|-------------------|
| <b>Diameter Over Jacket</b> | 6.4 mm   0.252 in |
|-----------------------------|-------------------|

## Mechanical Specifications

|  |                         |
|--|-------------------------|
| <b>Minimum Bend Radius, loaded</b>       | 150 mm   5.906 in       |
| <b>Minimum Bend Radius, unloaded</b>     | 90 mm   3.543 in        |
| <b>Tensile Load, short term, maximum</b> | 1500 N   337.214 lbf    |
| <b>Cable Crush Resistance, maximum</b>   | 20 N/mm   114.203 lb/in |

## Optical Specifications

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**Fiber Type** OM3

## Optical Specifications, Wavelength Specific

**Standards Compliance** IEC 60794-1 | TIA-492AAAC (OM3)

## Environmental Specifications

**Installation temperature** -5 °C to +50 °C (+23 °F to +122 °F)

**Operating Temperature** -20 °C to +60 °C (-4 °F to +140 °F)

**Storage Temperature** -20 °C to +60 °C (-4 °F to +140 °F)

**EN50575 CPR Cable EuroClass Fire Performance** Cca

**EN50575 CPR Cable EuroClass Smoke Rating** s2

**EN50575 CPR Cable EuroClass Droplets Rating** d1

**EN50575 CPR Cable EuroClass Acidity Rating** a1

**Environmental Space** Universal Low Smoke Zero Halogen (ULSZH)

## Packaging and Weights

**Cable weight** 46 kg/km | 30.911 lb/kft

## Regulatory Compliance/Certifications

| Agency     | Classification   |
|------------|--|
| CENELEC    | EN 50575 compliant, Declaration of Performance (DoP) available   |
| 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-5L-TB – LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

## \* Footnotes

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

## LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

### LazrSPEED® 300

#### 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>             | 1 %                                    |
| <b>Coating Diameter (Colored)</b>                    | 254 µm                                 |
| <b>Coating Diameter (Uncolored)</b>                  | 245 µm                                 |
| <b>Coating Diameter Tolerance (Colored)</b>          | ±7 µm                                  |
| <b>Coating Diameter Tolerance (Uncolored)</b>        | ±10 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>                     | 1.5 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>             | 8.9 N   2.001 lbf                     |

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|   |                   |
|---|-------------------|
| <b>Coating Strip Force, minimum</b>       | 1.3 N   0.292 lbf |
| <b>Dynamic Fatigue Parameter, minimum</b> | 18                |

## Optical Specifications

|  |                     |
|--|---------------------|
| <b>Numerical Aperture</b>                  | 0.2                 |
| <b>Numerical Aperture Tolerance</b>        | ±0.015              |
| <b>Point Defects, maximum</b>              | 0.15 dB             |
| <b>Zero Dispersion Slope, maximum</b>      | 0.105 ps/[km-nm-nm] |
| <b>Zero Dispersion Wavelength, maximum</b> | 1316 nm             |
| <b>Zero Dispersion Wavelength, minimum</b> | 1297 nm             |

## Optical Specifications, Wavelength Specific

|                                     |   |
|-------------------------------------|---|
| <b>1 Gbps Ethernet Distance</b>     | 1,020 m @ 850 nm   600 m @ 1,300 nm                           |
| <b>10 Gbps Ethernet Distance</b>    | 300 m @ 850 nm  |
| <b>Attenuation, maximum</b>         | 1.00 dB/km @ 1,300 nm   3.00 dB/km @ 850 nm                   |
| <b>Backscatter Coefficient</b>      | -68.0 dB @ 850 nm   -75.7 dB @ 1,300 nm                       |
| <b>Bandwidth, Laser, minimum</b>    | 2,000 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm                 |
| <b>Bandwidth, OFL, minimum</b>      | 1,500 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm                 |
| <b>Differential Mode Delay</b>      | 0.70 ps/m @ 850 nm  |
| <b>Differential Mode Delay Note</b> | Superior to ANSI/TIA TIA-492AAAF and IEC 60793-2-10 at 850 nm |
| <b>Index of Refraction</b>          | 1.479 @ 1,300 nm   1.483 @ 850 nm                             |
| <b>Standards Compliance</b>         | ANSI/TIA-492AAAF (OM3)  |

## Environmental Specifications

|  |                    |
|--|--------------------|
| <b>Heat Aging, maximum</b>                   | 0.20 dB/km @ 85 °C |
| <b>Temperature Dependence, maximum</b>       | 0.1 dB/km          |
| <b>Temperature Humidity Cycling, maximum</b> | 0.2 dB/km          |
| <b>Water Immersion, maximum</b>              | 0.20 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

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|  |   |
|--|---|
| <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 |