



Fiber indoor/outdoor cable, LazrSPEED®, Mini Single Jacket, All-Dielectric, Low Smoke Zero Halogen (LSZH), 12 fiber, Multimode OM4, Gel-Filled, Stranded Loose Tube, Meters jacket marking, Black jacket color, Dca flame rating

Product Classification

|                       |                            |
|-----------------------|----------------------------|
| Regional Availability | EMEA                       |
| 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-filled  |
| Filler, quantity             | 5   |
| Jacket Color                 | Black   |
| Jacket Marking               | Meters  |
| Jacket Marking Method        | Inkjet  |
| Jacket Marking Text          | COMMSCOPE GB OPTICAL CABLE 5K MM 12 FIBER EN50575 CLASS D<br>[SERIAL NUMBER] [MM/YY] [METRE MARK] |
| Subunit, quantity            | 1   |
| Fibers per Subunit, quantity | 12  |
| Total Fiber Count            | 12  |

Dimensions

|                              |                  |
|------------------------------|------------------|
| Buffer Tube/Subunit Diameter | 2 mm   0.079 in  |
| Diameter Over Jacket         | 11 mm   0.433 in |

Representative Image



Mechanical Specifications

|                                   |                                       |
|-----------------------------------|---------------------------------------|
| Minimum Bend Radius, loaded       | 165 mm   6.496 in                     |
| Minimum Bend Radius, unloaded     | 110 mm   4.331 in                     |
| Tensile Load, long term, maximum  | 800 N   179.847 lbf                   |
| Tensile Load, short term, maximum | 2700 N   606.984 lbf                  |
| Compression                       | 22 N/mm   125.623 lb/in               |
| Compression Test Method           | IEC 60794-1 E3                        |
| Flex                              | 25 cycles                             |
| Flex Test Method                  | IEC 60794-1 E6                        |
| Impact                            | 10 N-m   88.507 in lb                 |
| Impact Test Method                | IEC 60794-1 E4                        |
| Strain                            | See long and short term tensile loads |
| Strain Test Method                | IEC 60794-1 E1                        |
| Twist                             | 10 cycles                             |
| Twist Test Method                 | IEC 60794-1 E7                        |
| Vertical Rise, maximum            | 643 m   2,109.58 ft                   |

Optical Specifications

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

Environmental Specifications

|                          |                                      |
|--------------------------|--------------------------------------|
| Installation temperature | -30 °C to +60 °C (-22 °F to +140 °F) |
| Operating Temperature    | -40 °C to +70 °C (-40 °F to +158 °F) |

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|   |   |
|---|---|
| <b>Storage Temperature</b>                          | -40 °C to +75 °C (-40 °F to +167 °F)                    |
| <b>Cable Qualification Standards</b>                | EN 187105   IEC 60794-1-2                               |
| <b>EN50575 CPR Cable EuroClass Fire Performance</b> | Dca   |
| <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 60332-1-2   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>                | IEC 60794-1 F5  |

## Environmental Test Specifications

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| <b>Cable Freeze</b>                  | -2 °C   28.4 °F                      |
| <b>Cable Freeze Test Method</b>      | IEC 60794-1 F15                      |
| <b>Drip</b>                          | 70 °C   158 °F                       |
| <b>Drip Test Method</b>              | IEC 60794-1 E14                      |
| <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 +60 °C (-22 °F to +140 °F) |
| <b>Low High Bend Test Method</b>     | IEC 60794-1 E11                      |
| <b>Temperature Cycle</b>             | -40 °C to +70 °C (-40 °F to +158 °F) |
| <b>Temperature Cycle Test Method</b> | IEC 60794-1 F1                       |

## Packaging and Weights

|                     |                           |
|---------------------|---------------------------|
| <b>Cable weight</b> | 128 kg/km   86.012 lb/kft |
|---------------------|---------------------------|

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>   |
|---------------|---|
| CHINA-ROHS    | Below maximum concentration value   |
| REACH-SVHC    | Compliant as per SVHC revision on <a href="https://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS          | Compliant   |
| UK-ROHS       | Compliant   |



## Included Products

CS-5K-LT – 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

|              |               |
|--------------|---------------|
| Portfolio    | CommScope®    |
| Product Type | Optical fiber |

General Specifications

|   |                        |
|---|------------------------|
| Cladding Diameter                             | 125 µm                 |
| Cladding Diameter Tolerance                   | ±5 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 µm                 |
| Proof Tensile Stress                          | 100,000 psi (0.69 GPa) |

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, maximum             | 8.9 N   2.001 lbf                     |
| Coating Strip Force, minimum             | 1.3 N   0.292 lbf                     |
| Dynamic Fatigue Parameter, minimum       | 18                                    |

Optical Specifications

|                    |     |
|--------------------|-----|
| Numerical Aperture | 0.2 |
|--------------------|-----|

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|                                     |                     |
|-------------------------------------|---------------------|
| Numerical Aperture Tolerance        | ±0.015              |
| Point Defects, maximum              | 0.15 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, maximum       | 0.1 dB/km          |
| Temperature Humidity Cycling, maximum | 0.2 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) up to 95% relative humidity |