# 760021659   |   N-002-ZC-5K-F16AQ/E

Fiber Indoor Cable, LazrSPEED® 1.6 mm Low Smoke Zero Halogen Riser, 2-fiber Zipcord, Multimode OM4, Feet jacket marking, Aqua jacket color, Eca Flame Rating

## Product Classification

| | |
|---|---|
| **Regional Availability** | Asia   |   Australia/New Zealand   |   EMEA   |   Latin America   |   North America |
| **Portfolio** | CommScope® |
| **Product Type** | Fiber indoor cable |
| **Product Series** | N-ZC |

## General Specifications

| | |
|---|---|
| **Cable Type** | Cordage |
| **Construction Type** | Non-armored |
| **Subunit Type** | Gel-free |
| **Jacket Color** | Aqua |
| **Jacket Marking** | Feet |
| **Total Fiber Count** | 2 |

## Dimensions

| | |
|---|---|
| **Height Over Jacket** | 1.7 mm   |   0.067 in |
| **Width Over Jacket** | 3.5 mm   |   0.138 in |

## Representative Image

COMMSCOPE®

## Mechanical Specifications

| | |
|---|---|
| **Minimum Bend Radius, loaded** | 38 mm  \|  1.496 in |
| **Minimum Bend Radius, unloaded** | 15 mm  \|  0.591 in |
| **Tensile Load, long term, maximum** | 53 N  \|  11.915 lbf |
| **Tensile Load, short term, maximum** | 178 N  \|  40.016 lbf |
| **Compression** | 10 N/mm  \|  57.101 lb/in |
| **Compression Test Method** | FOTP-41  \|  IEC 60794-1 E3 |
| **Flex** | 300 cycles |
| **Flex Test Method** | FOTP-104  \|  IEC 60794-1 E6 |
| **Impact** | 0.74 N-m  \|  6.55 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** | 500 m  \|  1,640.42 ft |

## Optical Specifications

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

## Environmental Specifications

| | |
|---|---|
| **Installation temperature** | -20 °C to +60 °C (-4 °F to +140 °F) |

COMMSCOPE®

# 760021659 | N-002-ZC-5K-F16AQ/E

| | |
|---|---|
| **Operating Temperature** | -20 °C to +70 °C (-4 °F to +158 °F) |
| **Storage Temperature** | -40 °C to +70 °C (-40 °F to +158 °F) |
| **Cable Qualification Standards** | ANSI/ICEA S-83-596  \|  Telcordia GR-409 |
| **EN50575 CPR Cable EuroClass Fire Performance** | Eca |
| **Environmental Space** | Low Smoke Zero Halogen (LSZH)  \|  Riser |
| **Flame Test Listing** | NEC OFNR-ST1 (ETL) and c(ETL) |
| **Flame Test Method** | IEC 60332-1-2  \|  IEC 60332-3  \|  IEC 60754-2  \|  IEC 61034-2  \|  UL 1666  \|  UL 1685 |

## Environmental Test Specifications

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

## Packaging and Weights

| | |
|---|---|
| **Cable weight** | 6 kg/km  \|  4.032 lb/kft |

## Regulatory Compliance/Certifications

| Agency | Classification |
|---|---|
| CENELEC | EN 50575 compliant, Declaration of Performance (DoP) available |
| CHINA-ROHS | Below maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

## Included Products

| | | |
|---|---|---|
| CS-5K-TB | – | LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber |

## * Footnotes

COMMSCOPE®

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

COMMSCOPE®

| LazrSPEED® 550 | LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber |
|---|---|

## Product Classification

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

## General Specifications

| | |
|---|---|
| **Cladding Diameter** | 125 µm |
| **Cladding Diameter Tolerance** | ±0.8 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 Test** | 689.476 N/mm²  \|  100000 psi |
| **Tight Buffer Diameter** | 900 µm |
| **Tight Buffer Diameter Tolerance** | ±40 µm |

## 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 |

COMMSCOPE®

# CS-5K-TB

| | |
|---|---|
| **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   \|   0.88 ps/m @ 1,300 nm |
| **Differential Mode Delay Note** | Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm |
| **Index of Refraction** | 1.479 @ 1,300 nm   \|   1.483 @ 850 nm |
| **Standards Compliance** | IEC 60793-2-10, type A1a.3a   \|   IEC 60793-2-10, type A1a.3b   \|   TIA-492AAAD (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 |

**ISO 9001:2015**

## * 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) |

**COMMSCOPE®**

up to 95% relative humidity

COMMSCOPE®