

Fiber OSP cable, LazrSPEED®, Light Duty, Single Jacket, All-Dielectric, 48 fiber, Gel-Free, Stranded Loose Tube, Multimode OM4, Feet jacket marking, Black jacket color

#### Product Classification

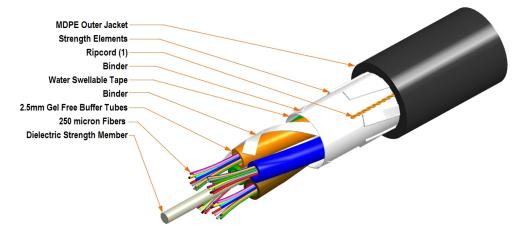
Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	D-LN
General Specifications	
Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-free
Filler, quantity	0
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	4
Fibers per Subunit, quantity	12
Total Fiber Count	48
Dimensions	
Buffer Tube/Subunit Diameter	2.5 mm   0.098 in
Diameter Over Jacket	9.3 mm   0.366 in

### Representative Image

Page 1 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: November 8, 2023





#### Material Specifications

Jacket Material	PE
Mechanical Specifications	
Minimum Bend Radius, loaded	140 mm   5.512 in
Minimum Bend Radius, unloaded	93 mm   3.661 in
Tensile Load, long term, maximum	400 N   89.924 lbf
Tensile Load, short term, maximum	1335 N   300.12 lbf
Compression	22 N/mm   125.623 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	2.94 N-m   26.021 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	788 m   2,585.302 ft

#### **Optical Specifications**

Fiber Type

OM4, LazrSPEED® 550 | OM4, LazrSPEED® 550

Page 2 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: November 8, 2023



#### **Environmental Specifications**

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-87-640   EN 187105
Environmental Space	Aerial, lashed   Buried
Jacket UV Resistance	UV stabilized
Water Penentration	24 h
Water Penentration Test Method	FOTP-82   IEC 60794-1 F5

#### **Environmental Test Specifications**

Cable Freeze	-2 °C   28.4 °F
Cable Freeze Test Method	FOTP-98   IEC 60794-1 F15
Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °F)
Low High Bend Test Method	FOTP-37   IEC 60794-1 E11
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1

#### Packaging and Weights

#### Cable weight

52 kg/km | 34.942 lb/kft

#### Regulatory Compliance/Certifications

Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



Agency

#### Included Products

CS-5K-LT

LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

## \* Footnotes

Page 3 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: November 8, 2023

**COMMSCOPE**<sup>®</sup>

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

Page 4 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: November 8, 2023



## 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

#### 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
Numerical Aperture Tolerance	±0.015
Point Defects, maximum	0.15 dB

Page 5 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: September 5, 2023



## CS-5K-LT

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

Classification

#### Agency

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) up to 95% relative humidity

Page 6 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: September 5, 2023

