



Fiber OSP cable, LazrSPEED® Single Jacket All-Dielectric, 96 fiber, Gel-Free, Stranded Loose Tube, Multimode OM5, 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
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	8
Fibers per Subunit, quantity	12
Total Fiber Count	96

## Dimensions

Buffer Tube/Subunit Diameter	2.5 mm   0.098 in
Diameter Over Jacket	12 mm   0.472 in

## Representative Image



Material Specifications

Jacket Material

PE

Mechanical Specifications

Minimum Bend Radius, loaded

180 mm | 7.087 in

Minimum Bend Radius, unloaded

120 mm | 4.724 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

FOTP-41 | IEC 60794-1 E3

Flex

25 cycles

Flex Test Method

FOTP-104 | IEC 60794-1 E6

Impact

4.41 N-m | 39.032 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

904 m | 2,965.879 ft

Optical Specifications

Fiber Type

OM5, LazrSPEED® wideband | OM5, LazrSPEED® wideband

## 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   Telcordia GR-20
Environmental Space	Aerial, lashed   Buried
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration 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	90 kg/km   60.477 lb/kft
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## Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

## Included Products

CS-5G-LT	– LazrSPEED® OM5 WideBand Multimode Fiber
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## \* Footnotes

Operating Temperature	Specification applicable to non-terminated bulk fiber cable
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LazrSPEED® OM5 WideBand 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	0.7 %
Coating Diameter (Colored)	254 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±7 µm
Coating Diameter Tolerance (Uncolored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	50 µm
Core Diameter Tolerance	±2.5 µm
Core/Clad Offset, maximum	1 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	4.5 N   1.012 lbf
Coating Strip Force, minimum	0.9 N   0.202 lbf
Dynamic Fatigue Parameter, minimum	18

Optical Specifications

Numerical Aperture	0.2
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# CS-5G-LT

Numerical Aperture Tolerance	±0.010
Point Defects, maximum	0.15 dB
Zero Dispersion Slope, maximum (OM5)	-412/(840(1-(λ0/840)^4)) ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1328 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   2.20 dB/km @ 953 nm   3.00 dB/km @ 850 nm
Bandwidth, Laser, minimum	2,600 MHz-km @ 953 nm   4,700 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
Bandwidth, OFL, minimum	1,950 MHz-km @ 953 nm   3,500 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
Index of Refraction	1.478 @ 1,300 nm   1.483 @ 850 nm
Standards Compliance	ANSI/TIA-492AAAF (OM5)   ANSI/TIA-568.3 (OM5)   IEC 60793-2-10, A1 (OM5)   ISO/IEC 11801-1 cabled optical fiber performance category OM5

## Environmental Specifications

Heat Aging, maximum	0.10 dB/km @ 85 °C
Temperature Dependence, maximum	0.1 dB/km
Temperature Humidity Cycling, maximum	0.1 dB/km
Water Immersion, maximum	0.10 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