



Fiber indoor/outdoor cable, LazrSPEED®, Single Jacket All-Dielectric, Low Smoke Zero Halogen (LSZH), 48 fiber, Multimode OM5, Gel-Free, Stranded Loose Tube, Black jacket color, Meters cable marking, Eca flame rating

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber indoor/outdoor cable
<b>Product Series</b>	C-LN

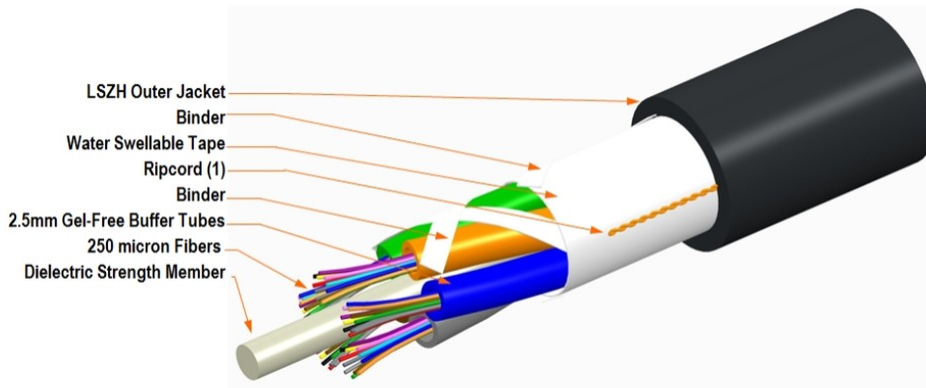
## General Specifications

<b>Cable Type</b>	Stranded loose tube
<b>Construction Type</b>	Non-armored
<b>Subunit Type</b>	Gel-free
<b>Filler, quantity</b>	0
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Meters
<b>Jacket Marking Method</b>	Inkjet
<b>Jacket Marking Text</b>	COMMSCOPE GB OPTICAL CABLE OM5 MM 48 FIBER EN50575 CLASS E [SERIAL NUMBER] [MM /YY] [METRE MARK]
<b>Subunit, quantity</b>	5
<b>Fibers per Subunit, quantity</b>	12
<b>Total Fiber Count</b>	48

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	2.5 mm   0.098 in
<b>Diameter Over Jacket</b>	11.7 mm   0.461 in

## Representative Image



## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	175 mm   6.89 in
<b>Minimum Bend Radius, unloaded</b>	117 mm   4.606 in
<b>Tensile Load, long term, maximum</b>	800 N   179.847 lbf
<b>Tensile Load, short term, maximum</b>	2700 N   606.984 lbf
<b>Compression</b>	22 N/mm   125.623 lb/in
<b>Compression Test Method</b>	FOTP-41   IEC 60794-1 E3
<b>Flex</b>	25 cycles
<b>Flex Test Method</b>	FOTP-104   IEC 60794-1 E6
<b>Impact</b>	3 N-m   26.552 in lb
<b>Impact Test Method</b>	FOTP-25   IEC 60794-1 E4
<b>Strain</b>	See long and short term tensile loads
<b>Strain Test Method</b>	FOTP-33   IEC 60794-1 E1
<b>Twist</b>	10 cycles
<b>Twist Test Method</b>	FOTP-85   IEC 60794-1 E7
<b>Vertical Rise, maximum</b>	654 m   2,145.669 ft

## Optical Specifications

<b>Fiber Type</b>	OM5, LazrSPEED® wideband
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## Environmental Specifications

<b>Installation temperature</b>	-30 °C to +60 °C (-22 °F to +140 °F)
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<b>Operating Temperature</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Storage Temperature</b>	-40 °C to +75 °C (-40 °F to +167 °F)
<b>Cable Qualification Standards</b>	ANSI/ICEA S-104-696   EN 187105   Telcordia GR-20   Telcordia GR-409
<b>EN50575 CPR Cable EuroClass Fire Performance</b>	Eca
<b>Environmental Space</b>	Aerial, lashed   Buried   Low Smoke Zero Halogen (LSZH)
<b>Flame Test Listing</b>	EN 50399
<b>Flame Test Method</b>	EN 50399   IEC 60332-1-2   IEC 60754-2
<b>Jacket UV Resistance</b>	UV stabilized
<b>Water Penetration</b>	24 h
<b>Water Penetration Test Method</b>	FOTP-82   IEC 60794-1 F5

## Environmental Test Specifications

<b>Cable Freeze</b>	-2 °C   28.4 °F
<b>Cable Freeze Test Method</b>	FOTP-98   IEC 60794-1 F15
<b>Drip</b>	70 °C   158 °F
<b>Drip Test Method</b>	FOTP-81   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>	FOTP-37   IEC 60794-1 E11
<b>Temperature Cycle</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Temperature Cycle Test Method</b>	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

<b>Cable weight</b>	125 kg/km   83.996 lb/kft
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## Included Products

CS-5G-LT – LazrSPEED® OM5 WideBand Multimode Fiber

## \* Footnotes

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

## LazrSPEED® OM5 WideBand Multimode Fiber

### LazrSPEED® 550

#### 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>	0.7 %
<b>Coating Diameter (Colored)</b>	254 µm
<b>Coating Diameter (Uncolored)</b>	242 µm
<b>Coating Diameter Tolerance (Colored)</b>	±7 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±5 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 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi

#### 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>	4.5 N   1.012 lbf
<b>Coating Strip Force, minimum</b>	0.9 N   0.202 lbf
<b>Dynamic Fatigue Parameter, minimum</b>	18

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## Optical Specifications

<b>Numerical Aperture</b>	0.2
<b>Numerical Aperture Tolerance</b>	±0.010
<b>Point Defects, maximum</b>	0.15 dB
<b>Zero Dispersion Slope, maximum (OM5)</b>	$-412/(840(1-(\lambda_0/840)^4))$ ps/[km-nm-nm]
<b>Zero Dispersion Wavelength, maximum</b>	1328 nm
<b>Zero Dispersion Wavelength, minimum</b>	1297 nm

## Optical Specifications, Wavelength Specific

<b>1 Gbps Ethernet Distance</b>	1,110 m @ 850 nm   600 m @ 1,300 nm
<b>10 Gbps Ethernet Distance</b>	550 m @ 850 nm
<b>Attenuation, maximum</b>	1.00 dB/km @ 1,300 nm   2.20 dB/km @ 953 nm   3.00 dB/km @ 850 nm
<b>Bandwidth, Laser, minimum</b>	2,600 MHz-km @ 953 nm   4,700 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
<b>Bandwidth, OFL, minimum</b>	1,950 MHz-km @ 953 nm   3,500 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
<b>Index of Refraction</b>	1.478 @ 1,300 nm   1.483 @ 850 nm
<b>Standards Compliance</b>	ANSI/TIA-568.3-D wideband multimode fiber cable   IEC 60793-2-10, edition 6, model A1a.4   ISO 11801-1 cabled optical fiber performance category OM5   TIA-492AAAE (OM5)

## Environmental Specifications

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