# 760123455 | P-048-DS-5L-FMUGR



Fiber indoor cable, LazrSPEED® Plenum Distribution, 48-Fiber Multi-Unit with 12-Fiber Subunits, Multimode OM3, Gel-free, Feet jacket marking, Green jacket color

#### Product Classification

Regional Availability	Asia   Australia/New Zealand   Latin America   Middle East /Africa   North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	P-DS
General Specifications	
Cable Type	Distribution
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Green
Jacket Marking	Feet
Subunit, quantity	4
Fibers per Subunit, quantity	12
Total Fiber Count	48
Dimensions	
Buffer Tube/Subunit Diameter	5.77 mm   0.227 in
Diameter Over Jacket	14.91 mm   0.587 in

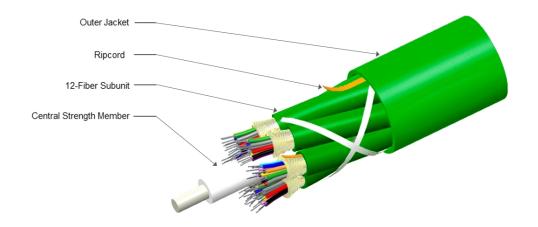
#### Representative Image

Page 1 of 6

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#### Mechanical Specifications

Minimum Bend Radius, loaded	224 mm   8.819 in
Minimum Bend Radius, unloaded	149 mm   5.866 in
Tensile Load, long term, maximum	400 N   89.924 lbf
Tensile Load, short term, maximum	1335 N   300.12 lbf
Compression	10 N/mm   57.101 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	100 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	5.88 N-m   52.042 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	199 m   652.887 ft
Optical Specifications	
Fiber Type	OM3, LazrSPEED® 300   OM3, LazrSPEED® 300

#### **Environmental Specifications**

Installation temperature

0 °C to +70 °C (+32 °F to +158 °F)

Page 2 of 6

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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
Environmental Space	Plenum
Flame Test Listing	NEC OFNP (ETL) and c(ETL)
Flame Test Method	NFPA 130   NFPA 262

#### **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

205 kg/km | 137.754 lb/kft

#### Regulatory Compliance/Certifications

Agency	Classification
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-5L-TB

LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

#### \* Footnotes

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

Page 3 of 6

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### LazrSPEED<sup>®</sup> 300 LazrSPEED<sup>®</sup> 300 OM3 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

Page 4 of 6

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## CS-5L-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	1,020 m @ 850 nm   600 m @ 1,300 nm
10 Gbps Ethernet Distance	300 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	2,000 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
Bandwidth, OFL, minimum	1,500 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	TIA-492AAAC (OM3)

#### **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	Humidity Cyc	ling maximum

Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

**ty Cycling, maximum** Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity

Page 5 of 6

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Page 6 of 6

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