

# CS-5LEB-MP

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LazrSPEED® 300 Launch Control Bend Insensitive OM3 Multimode Fiber

## LazrSPEED® 300

### 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>	±0.4 µm
<b>Cladding Non-Circularity, maximum</b>	0.7 %
<b>Coating Diameter (Colored)</b>	254 µm
<b>Coating Diameter (Uncolored)</b>	245 µm
<b>Coating Diameter Tolerance (Colored)</b>	±7 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±10 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core Diameter</b>	50 µm
<b>Core Diameter Tolerance</b>	±0.5 µm
<b>Core/Clad Offset, maximum</b>	0.6 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>	0.10 dB @ 850 nm   0.30 dB @ 1,300 nm
<b>Macrobending, 7.5 mm Ø mandrel, 2 turns</b>	0.20 dB @ 850 nm   0.50 dB @ 1,300 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>	±0.002
<b>Point Defects, maximum</b>	0.15 dB
<b>Zero Dispersion Slope, maximum</b>	0.105 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>	1,020 m @ 850 nm   600 m @ 1,300 nm
<b>10 Gbps Ethernet Distance</b>	300 m @ 850 nm
<b>Attenuation, maximum</b>	1.00 dB/km @ 1,300 nm   3.00 dB/km @ 850 nm
<b>Backscatter Coefficient</b>	-68.0 dB @ 850 nm   -75.7 dB @ 1,300 nm
<b>Bandwidth, Laser, minimum</b>	2,000 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
<b>Bandwidth, OFL, minimum</b>	1,500 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
<b>Differential Mode Delay</b>	0.70 ps/m @ 850 nm   0.88 ps/m @ 1,300 nm
<b>Differential Mode Delay Note</b>	Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm
<b>Index of Refraction</b>	1.479 @ 1,300 nm   1.483 @ 850 nm
<b>Standards Compliance</b>	TIA-492AAAC (OM3)

## 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