

## LazrSPEED® 150

### Product Classification

|              |               |
|--------------|---------------|
| Portfolio    | CommScope®    |
| Product Type | Optical fiber |

### General Specifications

|   |                            |
|---|----------------------------|
| Cladding Diameter                             | 125 µm                     |
| Cladding Diameter Tolerance                   | ±5 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 |
| 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 |

# CS-5M-MP

|                                     |                     |
|-------------------------------------|---------------------|
| 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  | 600 m @ 1,300 nm   800 m @ 850 nm           |
| 10 Gbps Ethernet Distance | 150 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 | 500 MHz-km @ 1,300 nm   950 MHz-km @ 850 nm |
| Bandwidth, OFL, minimum   | 500 MHz-km @ 1,300 nm   700 MHz-km @ 850 nm |
| Differential Mode Delay   | 0.70 ps/m @ 850 nm   0.88 ps/m @ 1,300 nm   |
| Index of Refraction       | 1.479 @ 1,300 nm   1.483 @ 850 nm           |
| Standards Compliance      | TIA-492AAAB (OM2+)                          |

## 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

| 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 |