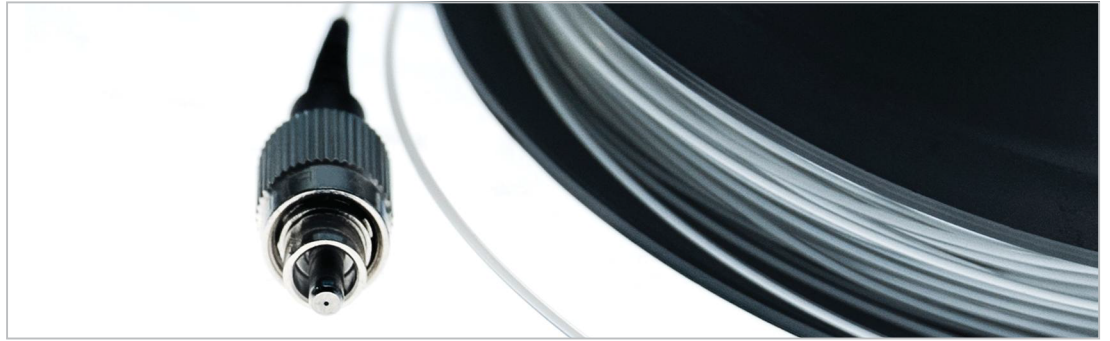


CORNING

Fibrance®
Light-Diffusing Fiber



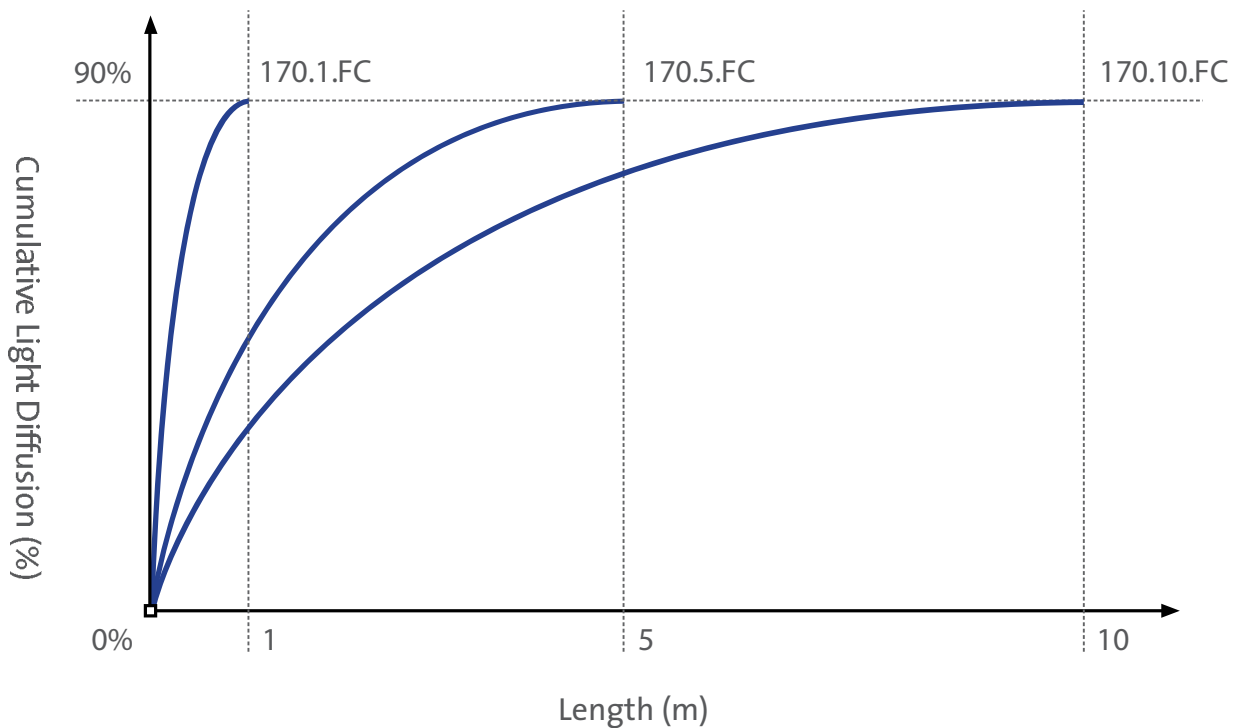
Corning® Fibrance® Light-Diffusing Fiber with Connectors (170.1.FC, 170.5.FC, 170.10.FC)

Specification Sheet

Corning® Fibrance® Light-Diffusing Fiber is a glass optical fiber made for thin, colorful, aesthetic lighting. This technology enables decorative lighting to be designed or embedded into tight or small places where other bulky lighting elements cannot fit.

With this fiber, designers can add light into a product where and how they want, while enhancing the product's overall appeal, functionality, and user experience. Fibrance® technology is available with an FC optical connector for attachment to Single-Color and Multi-Color Modules. Fibrance® technology is available in three light diffusing lengths for lighting flexibility, and can be ordered in a broad range of physical lengths.¹

Light Diffusion Characteristics



Optical:

Product Offering ²	170.1.FC	170.5.FC	170.10.FC
Light-Diffusion Length (Nominal)	1 m	5 m	10 m
Numerical Aperture	> 0.5		
Operating Wavelength Range	405 – 1000 nm		
Viewing Angle ³	> 120 degrees		
Optical Connector	FC		
Connector Options	One end connectorized is standard		

Mechanical:

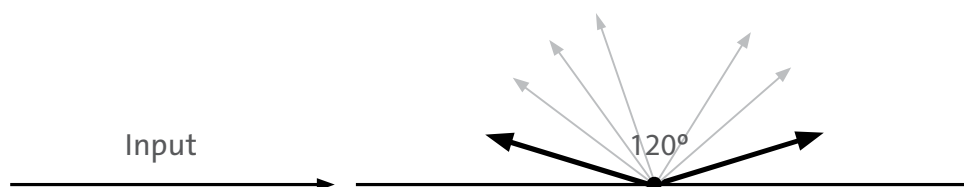
Core Diameter (µm)	170 ± 3		
Outer Diameter (µm)	230 ± 10		
Physical Length (cm)	100 ± 3	500 ± 5	1000 ± 10
Jacket Diameter (µm)	900		
Jacket Material	Optical Grade PVC		
Proof Test - Tensile Strength (kpsi)	> 100		

Environmental:

Operating Temperature Range	- 40 to 85 °C		
Storage Temperature Range	- 40 to 85 °C		

Notes:

- 1 Corning® Fibrance® Light-Diffusing Fiber with Connectors is available in standard lengths of 1 m, 5 m, and 10 m, with a clear 900 micron diameter outer jacket. Fiber designs have been optimized for use with Single-Color and Multi-Color laser modules.
- 2 Corning® Fibrance® Light-Diffusing Fiber products are designated by core diameter, light-diffusion length, and connector type. For example, a core diameter of 170 µm, light -diffusion length of 1 m, and FC connector is identified as 170.1.FC.
- 3 Viewing angle is defined as the angle at which the luminance is greater than 50% of the maximum. The fiber emits light uniformly in 360° around the circumference of the fiber, and >120° along the length of the fiber if viewed from either end.



CORNING | Fibrance® Light-Diffusing Fiber

For more information, visit our website:
www.corning.com/fibrance

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