



Corning® Fibrance™ Light-Diffusing Fiber

Specification Sheet

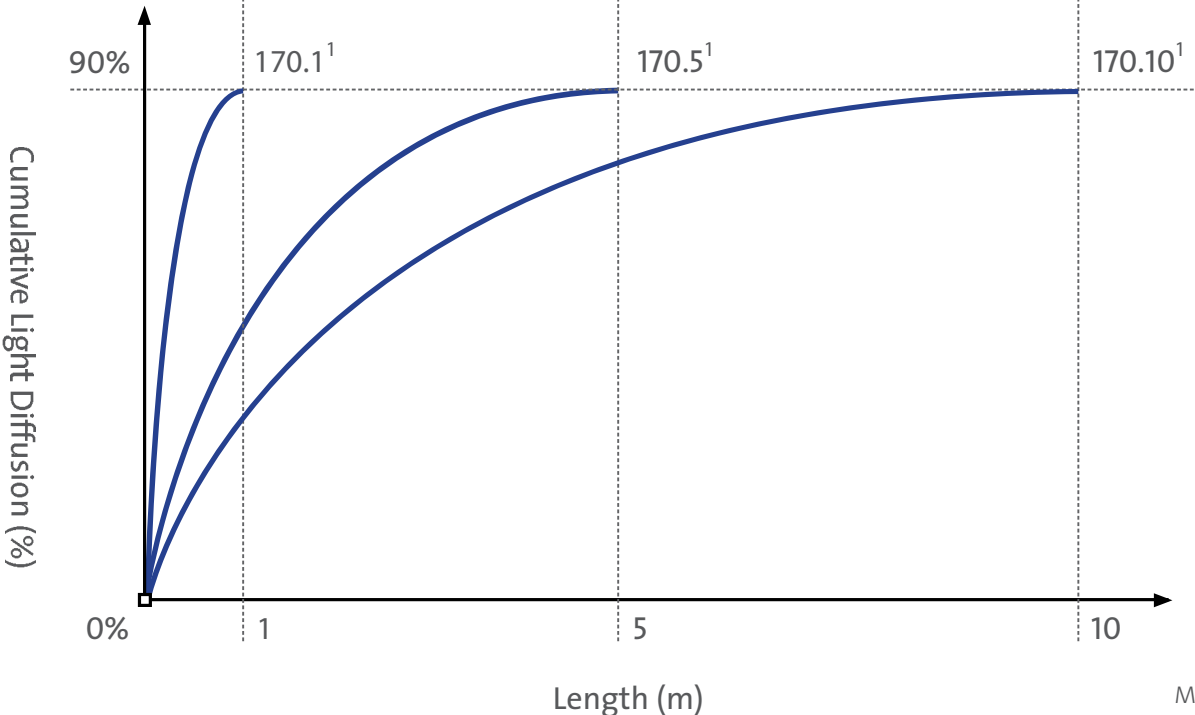
Corning® Fibrance™ Light-Diffusing Fiber is a glass optical fiber made for thin, colorful, aesthetic lighting. This technology enables decorative lighting to be designed or embedded into tight or small places where other bulky lighting elements cannot fit.

With this fiber, designers can add light where and how they want, while enhancing the product’s overall appeal, functionality, and user experience.

Product Attributes:

- Glass optical fiber
- Small, thin, and flexible
- Tight-bend capability
- Bright, clear color
- Emits continuous, uniform light
- Versatile for a variety of applications

Light Diffusion Characteristics



Optical:

Product Offering ¹	170.1	170.5	170.10
Light-Diffusion Length (Nominal)	1 m	5 m	10 m
Numerical Aperture	> 0.5		
Operating Wavelength Range	405 – 1000 nm evaluated, broader possible		
Viewing Angle ²	> 120 degrees		

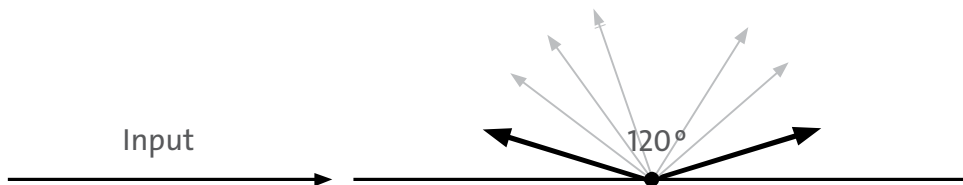
Mechanical:

Core Diameter (µm)	170 ± 3
Outer Diameter (µm)	230 ± 10
Proof Test - Tensile Strength (kpsi)	> 100

Environmental:

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

- 1 Different offerings of Corning® Fibrance™ Light-Diffusing Fiber are identified by the core diameter and light-diffusion length. For example, a core diameter of 170 and light-diffusion length of 1 m, is identified as 170.1.
- 2 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.



Products available in standard lengths of 1 m, 5 m, and 10 m diffusion lengths. Also available with 900 micron clear outer jacket. Fiber designs have been optimized for use with laser diode sources.

CORNING | Fibrance™ Light-Diffusing Fiber

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

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