



# Corning<sup>®</sup> Fibrance<sup>®</sup> Light-Diffusing Fiber

## **Specification Sheet**

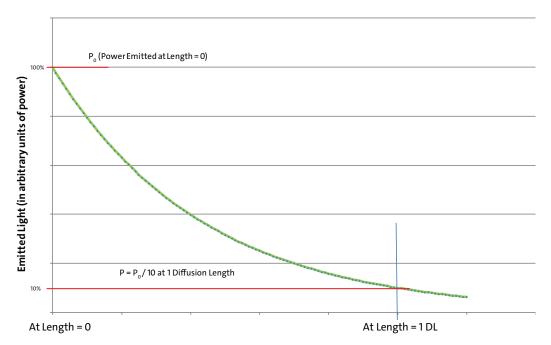
Corning® Fibrance® Light-Diffusing Fiber is a glass optical fiber made for thin, colorful, aesthetic lighting. This technology enables decorative lighting to be designed or embedded into tight or small places where other bulky lighting elements cannot fit.

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

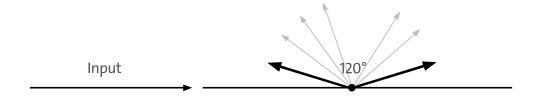
### **Light-Diffusion Characteristics**



#### Optical:

| Diffusion Length (Nominal)           | 1m            | 5m            | 10 m          |
|--------------------------------------|---------------|---------------|---------------|
| Numerical Aperture (nominal)         | 0.5           | 0.5           | 0.5           |
| Operating Wavelength Range (nm)      | 420 to 700    | 420 to 700    | 420 to 700    |
| Viewing Angle <sup>1</sup>           | > 120 degrees | > 120 degrees | > 120 degrees |
| Mechanical:                          |               |               |               |
| Core Diameter (µm)                   | 170 ± 3       | $170 \pm 3$   | 170 ± 3       |
| Outer Diameter (µm)                  | 230 +0/-10    | 230 +0/-10    | 230 +0/-10    |
| Proof Test - Tensile Strength (kpsi) | 100           | 100           | 100           |
| Jacket Diameter (μm) - (Nominal)     | 900           | 900           | 900           |
| Jacket Material                      | Clear PVC     | Clear PVC     | Clear PVC     |
| Environmental:                       |               |               |               |
| Operating Temperature Range (°C)     | -20 to + 65   | -20 to + 65   | -20 to + 65   |

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. Fiber lengths have been optimized for use with laser diode sources.

# CORNING | Fibrance® Light-Diffusing Fiber

For more information:

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