What is Fiber Optic Luminaries?

Fiber optic lighting uses optical fiber as a “light pipe,” transmitting light from a source through the fiber to a remote location.

It’s ideal for accent and mood lighting in commercial & residential settings, where extremely miniaturized non-electric illumination is the best solution. It is a safer alternative, suitable to light niche locations such as jewelry cases, pools, parks, exhibit cases, decorative down lights, landscape lighting etc.

Generally there are three (3) types of fiber optic lighting:

**End Light**
Light is directed from the luminaire through optic fiber where it is emitted to the end.

**Side Light**
Fiber optic also emit light from the side as well as the end.
This type of lighting is best suited for pools and architectural illumination.

**Environment Light**
Fluorescent fiber absorb light from the environment and emit to its ends.
This is a specialty fiber particularly used in sights for rifles, bows, decorative displays and sensors.

Why use Fiber Optics for lighting?

The most noteworthy advantage of using fiber optic lighting systems is that the light is separated from the electricity that generates light. This makes it possible to illuminate areas, such as pools, spas, fountains, or in environmentally sensitive industrial situations. The reason: fiber optic light produces no electrical shocks and will not become a fire hazard.

A side-light fiber can be used in places where the potential of breakage or of contact with a high voltage transformer that makes a neon light hazardous. In addition, fiber optic lighting systems use both heat (infrared or IR) and ultraviolet (UV) filters in the light source. As a result, the light emitted contains no UV and no heat. This is particularly desirable for lighting retail displays containing products that are sensitive to heat, as well as museum displays of temperature sensitive artifacts and art. Basically, dyes and oil paints won’t fade, chocolate won’t melt, and fresh flowers won’t wilt.

The use of fiber optic lighting systems can also lead to improved energy efficiency in some cases, particularly through the use of metal halide (HiD) light sources. Because a single lamp can drive many fibers and produce multiple points or lines of light, maintenance costs can be reduced and maintenance tasks simplified, particularly for the hard-to-reach lamp. In addition there is economy of scale, as one lamp can light an entire chandelier or a ceiling or wall of sprinkle lights. Overall, fiber optic lighting systems can be used in almost any lighting situation.

With several vibrant colors available, it is feasible to change colors gradually or have dramatic color switch effects plus sparkling animations that mimic starlight patterns on ceilings. This versatility lends itself to a creative and innovative lighting applications.

**Fiber Optic Dichroic Colors (1.1MM borofloat)**

- **Bikini Yellow**
- **Brilliant Orange**
- **Brilliant Blue**
- **Midnight Blue**
- **Aquamarine**
- **Forest Green**
- **Shocking Pink**
- **Red Rose**
- **Purple**
- **Softlite 2600K**
- **WarmWhite 3000K**
- **Snow White 4000K**
- **Super White 5000K**