

## OTFI-0250, -0280, -0290 LED Fiber Optic Light Module



### Key Features

- Variety of lumenous output and CRI options, including a minimum CRI of 90, or an output of 2400 lumens
- Safe - emits virtually no ultraviolet or infrared radiation
- Easy coupling – flange-mounted optical alignment features for fiber input port
- Low electrical noise – EMI-shielded
- Energy-efficient - consumes less energy than Xenon
- On board temperature sensor for thermal monitoring
- Variable speed fan
- Compatible with 1 mm – 6 mm diameter fibers
- RoHS-compliant

### Applications

- Endoscopy Light Sources
- Surgical Microscopy
- Medical Headlights

### Overview

Excelitas' LED Fiber Optic Illuminator Module provides a simple solution to the often-diverse requirements of endoscopy, surgical microscopy and medical headlight illumination applications.

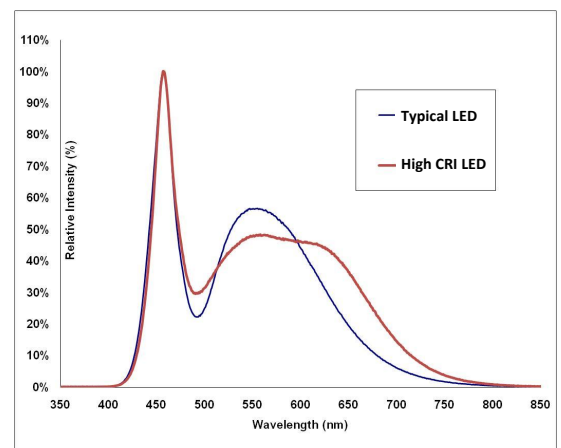
Combining superior optics with state-of-the-art LED technology, the illuminator module comes in a variety of output powers and CRI options, yielding brilliantly clear images for better visualization.

The LED Fiber Optic Light Module provides many advantages for the medical environment such as remarkable uniformity, virtually no ultraviolet or infrared emissions, maintenance-free, long-life operation, and a variable speed fan. Users of xenon, metal-halide and halogen lamps now have an alternative light source with all of these features.

To minimize an OEM's design time and to reduce time-to-market, the fiber optic module includes both metric and imperial mechanical mounting fasteners. A flange-mount shaft with pilot holes located on a 27 mm diameter circle enables device manufacturers to integrate their own fiber coupling. The LED Fiber Optic Illuminator Series incorporates patent-pending LED technology, precision optics, an integrated state-of-the art thermal management system, electro-magnetic interference shielding, and easy access screw terminals for electrical connections.

Excelitas offers OEMs a variety of component-level light modules to choose from and has a fiber optic illumination solution to meet every need.

### Spectral Profile



## OTFI-0250, -0280, -0290

# LED Fiber Optic Light Module

### Product Specifications

Parameter	Symbol	Min.	Typ.	Max	Unit	Remarks / Conditions
<b>Optical Characteristics</b>						
Luminous Flux (0250)			2000		Lumens	
Luminous Flux (0290)			2400		Lumens	
Luminous Flux (0280)			1600		Lumens	
Color Rendering (0280)	CRI	90	93			
Color Temperature (OTFI-0250,-0290)	CCT	5500	6300	7500	Kelvin	
Angle of light exit	FWHM		76		degrees	At 50% intensity points
Fiber compatibility	$\Phi$	1	5	6	mm	
<b>Electrical Characteristics</b>						
Input Voltage	VDC			5.4	Volts	Voltage for reference
Input Current	A			18		
<b>Environmental Characteristics</b>						
Cooling method	DC fan	7		12	Volts	Fan is rated for 70K hours
Operating Temperature	T <sub>o</sub>	0°... +40°	Humidity: 85% or less		°C	
Storage Temperature	T <sub>s</sub>	-20°... +65°	Humidity: 85% or less		°C	
<b>Dimensions</b>						
Physical dimensions	99 mm x 110 mm x 177 mm (H x W x D)		3.9" x 4.3" x 6.9" (H x W x D)			
Weight	916 grams; 32 ounces					
<b>Safety</b>						
Safety standards	Compliant with IEC/EN 60601-1; CE Mark					

Excelitas' Fiber Optic Light Module is a component-level module supplied to OEM medical device manufacturers for integration into endoscope, surgical microscope or medical headlight systems. The module includes: LEDs, optics, heat sink with fan, temperature sensor, and electrical terminal block. It is enclosed in a sheet metal enclosure with fan guards.

Custom solutions are available. Please inquire with Excelitas Technologies LED Solutions.

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