

# FIBER OPTIC - LIGHTBARS



THESE MADE TO ORDER FIXTURES MAKE IT EASY TO ACHIEVE LINEAR LIGHTING EFFECTS WITH CUSTOMIZED DIMENSIONS AND LIGHT INTENSITIES.

*Protect precious artifacts and make jewelry sparkle with IMPACT LIGHTING INC. Optibar LightBars. These made to order fixtures make it easy to achieve linear lighting effects for display cases and many other applications with customized dimensions and light intensities required for the project. For new designs or retrofits, LightBars can be made to the exact specifications needed.*

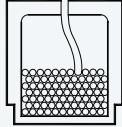
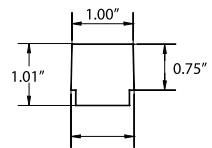
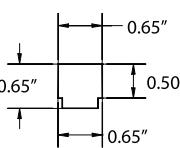
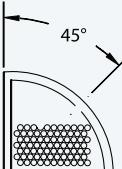
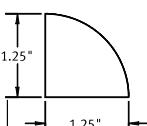
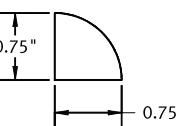
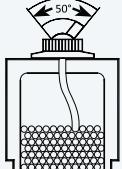
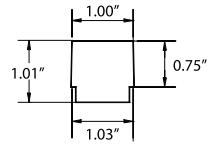
LightBars carry no electrical current and eliminate heat and harmful UV rays from exhibits by using a remote illumination source. These features make the fixtures suitable for harsh and inaccessible environments while allowing for easy lamp maintenance. Their low profile allows for well controlled illumination in a lighting design without the need for voluminous fixtures. Combining durable optical fiber with high quality aluminum housings, LightBars can be an excellent alternative to traditional linear lighting technologies.

With a variety of fixture types, Impact Lighting Inc. LightBar fixtures can provide unique methods to illuminate engraved acrylic or glass panels with the Optibar LightFrame series or provide linear illumination with adjustable spot lighting effects with the Optibar Light Point series. The TriAxis fixture gives the ability to cast light at three different angles for broad illumination while the Span Bar series provides similar benefits to the LightBeam in a round profile that can be equipped with mounting legs for a variety of applications.

## HERE ARE SOME SIMPLE GUIDELINES TO HELP GET THE MOST OUT OF IMPACT LIGHTING INC.'S LIGHTBARS

- All LightBar fixtures are made to order; a shop drawing is prepared for each fixture to ensure the product meets design requirements.
  - All LightBar fixtures are non-load bearing and they are NOT intended to support the weight of other objects.
  - Most LightBar fixtures can be used in exterior applications.
  - LightBeam, LightFrame, and LightBeam Quarter Round fixtures can be potted for underwater use. Use a non corrosive cleaner and clean rag to wipe down the fixtures regularly. This will help eliminate or reduce mildew build up.
  - All fiber tails are pre attached at the factory. Include at least 3' extra fiber length for use as a service loop after the installation is complete. Keep the jacketing over the fiber bundle to protect the fiber strands.
  - If multiple LightBar fixtures are used in any one application, maintain consistent fiber tail lengths. This will help ensure even light output from fixture to fixture. Fiber tails can be cut shorter in the field as long as an adequate service loop is kept for each unit. Once a fiber tail is cut, it cannot be extended or spliced.
  - When terminating the LightBar fixtures, please follow the standard porting instructions included with each illuminator or optical port kit.
  - The length of each LightBar is limited by the fiber intensity and total amount of fibers available for the fixture profile.
- A standard base size fixture can accommodate up to 480 fibers. The compact sized fixtures can accommodate up to 168 fibers. The overall total length of each bar cannot exceed 10 feet. The maximum bend radius is 60 inches.
- The Fiber Tail diameter is determined by the fiber intensity and total number of fibers used. Sizes are 7/16" for up to 85 fibers, 9/16" for up to 168 fibers, 3/4" for up to 240 fibers and 7/8" for up to 480 fibers. If the fiber optic tails will be run through conduit, please consult the factory for recommendations.
  - Please refer to maximum fiber capacities for each Impact Lighting Inc. illuminator when selecting the appropriate model for the application.
  - Mock-ups using engraved panels and LightFrame fixtures are always recommended to verify that the fixtures will illuminate the panels as desired. When attaching the LightFrame to a panel for illumination, the surface that has the fiber points should be in direct contact with the panel edge. This will allow for a better penetration of light from the fiber points into the medium.
  - LB-MB (LightBeam Mounting Brackets) can be used, but are not required, for mounting any of the LightBar fixtures. The LB-MB should be affixed to a suitable mounting surface using appropriate hardware before attaching the fixture to the mounting bracket with the supplied adhesive pads. LB-MB should be spaced approximately every 6-12" across the length of any LightBar fixture depending on orientation and total fixture size. It is possible to affix the LightBars directly to a substrate using an appropriate adhesive for the application, but if LB-MBs are not being used, the mounting details must be coordinated by others.
  - LB-MB is intended to be bent once for adjusting the fixture. Bending LB-MB more than once can cause breakage and deem the mount unusable.

# FIBER OPTIC - LIGHTBARS

	Standard Base	Compact Base
<b>LightBeam</b>  Order Type: LB		
<b>LightBeam QuarterRound</b>  Order Type: Optibar LB		
<b>Optibar Light Points</b>  Order Type: Optibar Light Points		Not Applicable

INTENSITY	Standard Base Configuration			Compact Base Configuration					
	Intensity	Fibers per Inch	Spacing	Max Lit Length	Fiber-bundle Max # of Fibers	Max Cable Diameter	Max Lit Length	Fiber-bundle Max # of Fibers	Max Cable Diameter
Low	1	1.000"	1.000"	120"	120	9/16"	120"	168	9/16"
Medium	2	0.500"	0.500"	120"	240	3/4"	84"	168	9/16"
High	4	0.250"	0.250"	108"	432	7/8"	42"	168	9/16"
Bright	5	0.200"	0.200"	96"	480	7/8"	34"	168	9/16"
SuperBright	6	0.166"	0.166"	80"	480	7/8"	28"	168	9/16"
XtraBright	8	0.125"	0.125"	60"	480	7/8"	21"	168	9/16"
UltraBright	10	0.100"	0.100"	48"	480	7/8"	17"	168	9/16"

Many custom configurations are available for our Light Bar products. Please consult factory for specifications and pricing

LightBeam, LightBeam QuarterRound, Foci

Ordering Guide

Type	Length	Tail	Intensity	Base Size	Exposure	Finish Type	Tail Exit
LB	1" to 120"	10' to 30'	01F Low 02F Medium 04F High 05F Bright 06F SuperBright 08F XtraBright 10F UltraBright 00C Custom	S Standard C Compact*	I Indoor O Outdoor* W Outdoor* wet/sub- mersible	C Clear Anodized B Black Anodized	L Left side R Right side D Dual Tail C Custom
OLB							
OLP							

\* not available for Foci

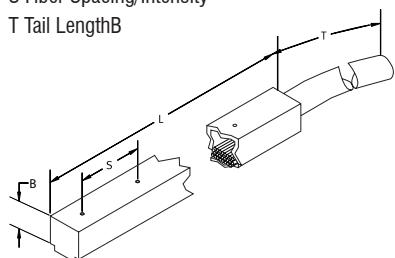
\*potted at factory  
not available for Foci

# FIBER OPTIC - LIGHTBARS



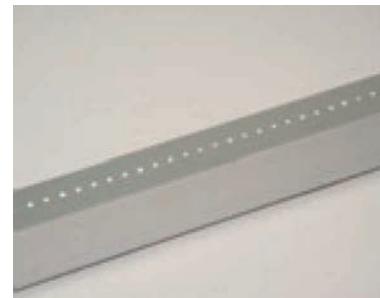
## Isometric Key:

- B Base Size
- L Lit Length (see table)
- S Fiber Spacing/Intensity
- T Tail LengthB



## OPTIBAR LIGHTBAR

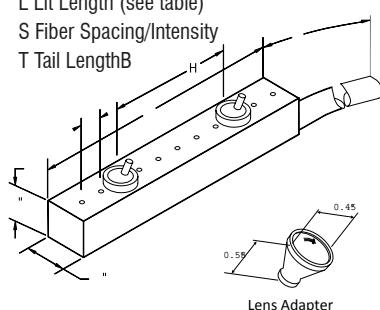
Primary Material: Aluminum extrusion  
 Beam Spread: 60°  
 Fiber Type: 0.75mm PMMA Fiber  
 Fiber Tail: 10', 20' or 30' Custom lengths available  
 Finishes: Clear or black anodized  
 Max Exp Rating: Indoor or outdoor use  
 Please specify with order  
 Linking: Soft links available for longer lengths and sharp corners  
 Mounting: Use LB-MB Mounting bracket



Emits individual light points along the axis; staggered light points available by custom order.

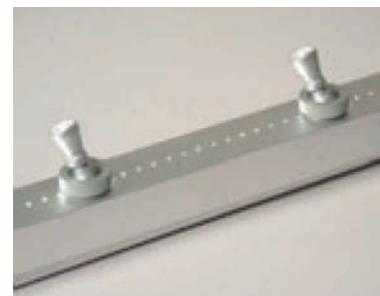
## Isometric Key:

- B Base Size
- L Lit Length (see table)
- S Fiber Spacing/Intensity
- T Tail LengthB



## OPTIBAR LIGHT POINTS

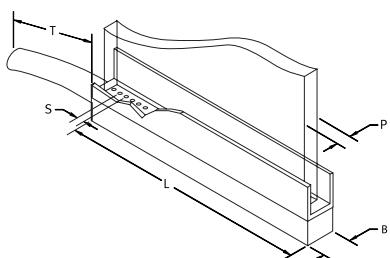
Primary Material: Aluminum extrusion  
 Beam Spread: 60°; 40° soft or hard edge  
 Lens Adapter available  
 Fiber Type : 0.75mm PMMA Fiber in light bar  
 25 x 0.50mm in each Focal Point  
 Fiber Tail: 10', 20' or 30'  
 Custom lengths available  
 Finishes: Clear or black anodized  
 Max Exp Rating: Indoor use only  
 Linking: Soft links available for longer lengths and sharp corners



Combines individual light points with a focus spot that is easily aimed and locked in place.

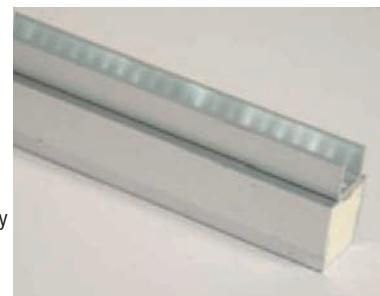
## Isometric Key:

- B Base size
- L Lit Length (see table)
- S Fiber Spacing (0.25", 0.5", & 1")
- T Tail Length
- P Panel thicknessB



## OPTIBAR LIGHT FRAME

Primary Material: Aluminum extrusion  
 Beam Spread: 60° until entering Panel, internally reflected  
 Fiber Type: 0.75mm PMMA Fiber  
 Fiber Tail: 10', 20' or 30', Custom lengths available  
 Finishes: Clear or black anodized  
 Max Exp Rating: Indoor or outdoor use. Please specify  
 Linking: Soft links available for longer lengths and sharp corners  
 Panel: Panel must be monolithic, acrylic, or high-clarity glass (not laminated, float glass, etc) and surface etched no more than 25%. Light penetration is generally 12"-24"  
 Mounting: Use LB-MB Mounting bracket (pg 104). LightFrame is not weight bearing; it should not support panel. Adhere to panel with clear silicone



Evenly illuminates etched and deep carved transparent panels by providing a receiving channel to align fibers.