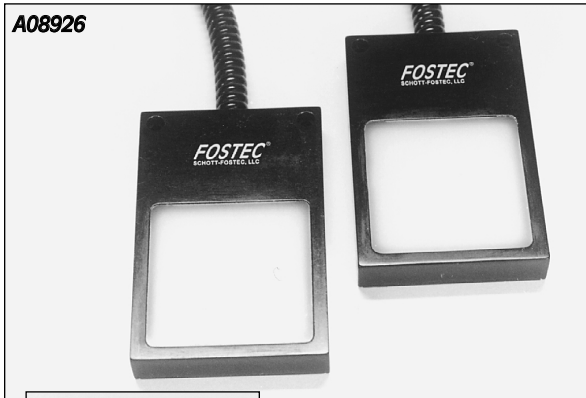


8" x 8" Backlight, A08927



Dual 2"x 2" Backlight, A08922



Backlight Color Filter Adapter, A08931

## Backlights

Patented SCHOTT-FOSTEC Backlights are calibrated to provide bright, even illumination for Microscopy and Machine Vision applications.

### FEATURES

- \* Calibrated from  $\pm 13$  to  $\pm 15$  gray scale levels at a mean of 200, gamma setting of 1.0, using a patented process to create diffuse, uniform illumination within the active area. Line scans are available upon request.
- \* The white acrylic diffuser plate provides the optimum combination of uniformity and intensity. The backlight housing is made of rugged, black anodized aluminum. The plastic fiber bundle is protected with flexible PVC covered metal tubing.
- \* Use with strobes and DCR® series and ACE® series halogen light sources. Other sources, particularly those without an IR filter, may damage the plastic fibers.
- \* All our dichroic color filters can be used on the products in conjunction with the A08931 backlight color filter adapter (see photo to left). More details can also be found in the Fiber Optic Accessory section of the product catalog.

### ADVANTAGES

- \* Compact, low profile housing fits in small spaces.
- \* Can be used to create a crisp edge definition, or soft, diffuse incident light.
- \* Dual and quad backlights increase lighting versatility. Additional combinations and sizes can be custom ordered.

### APPLICATIONS

- \* Glass inspection
- \* Edge Detection
- \* Surface Inspection

Backlights					
Part No.	Active Area	Housing Dimensions	Gray Scales	Bundle Length	Common Bundle Length
<b>Single Configuration</b>					
A08920	2" x 2" (51 x 51)	4" x 2.6" x .59" (102 x 66 x 14.9)	$\pm 13$	40" (1016)	N/A
A08923	3" x 3" (76 x 76)	6" x 3.5" x .75" (152 x 89 x 19.1)	$\pm 13$	40" (1016)	N/A
A08925	4" x 4.88" (102 x 124)	9" x 5" x .78" (229 x 127 x 19.7)	$\pm 13$	37" (940)	N/A
A08927	8" x 8" (203 x 203)	12" x 9" x 1" (305 x 229 x 25.4)	$\pm 15$	40" (1016)	N/A
<b>Dual Configuration</b>					
A08922	2" x 2" (51 x 51)	4" x 2.6" x .59" (102 x 66 x 14.9)	$\pm 13$	42" (1067)	10" (254)
A08924	3" x 3" (76 x 76)	6" x 3.5" x .63" (152 x 89 x 15.9)	$\pm 13$	40" (1016)	10" (254)
A08926	4" X 4.88" (102 X 124)	9" X 5" X .78" (229 X 127 X 19.7)	$\pm 13$	37" (940)	10" (254)

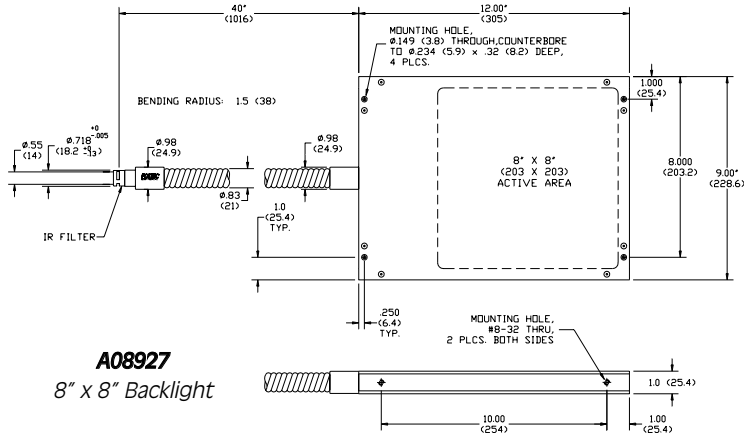
Dimensions in ( ) are in mm

# Technical Specifications

Product improvements may result in specification or feature changes without notice.

## Backlights

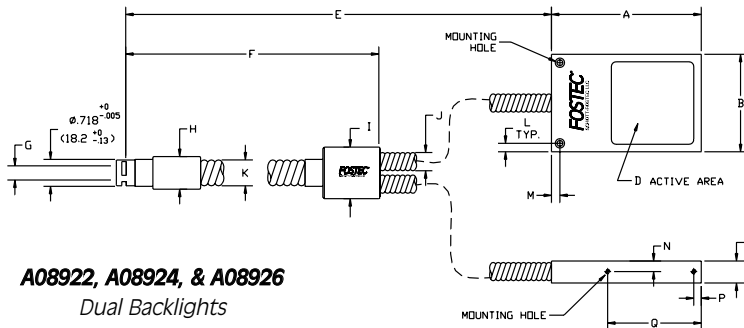
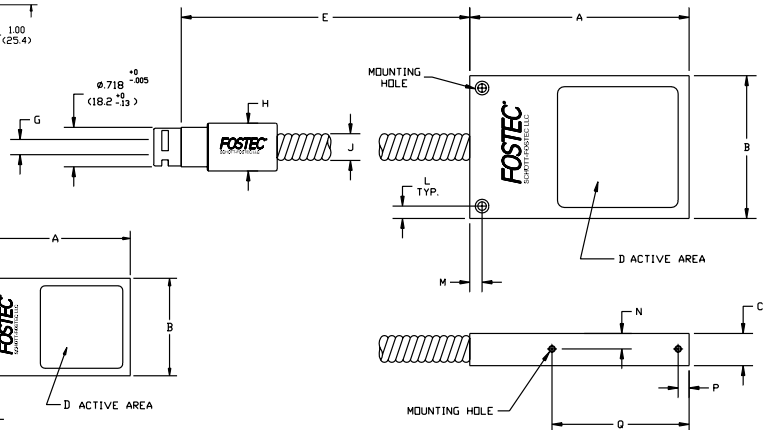
Dimensions in ( ) are in mm



**Input:** Black Anodized Aluminum  
**Bundle Sheathing:** PVC Covered Metal Tubing  
**Max. Fiber Temperature:** 70° C

**WARNING:**  
 The IR filter on the input protects the fibers from damage caused by IR absorption.

**A08920, A08923, & A08925**  
 Single backlights



### Matrix for Single and Dual Backlights

Part No.	Housing Dimensions LXW X H	Active Area	Overall Bundle Length	Common Bundle Length	Active Input Dia.	Ferrule Dia.	Coupler Dia.	Tubing Dia.	Top Mounting Hole Location	Top Mounting Hole Dimensions	Side Mounting Hole Location	Side Mounting Hole Dimensions	Bend Radius
Ref. Letter	A, B, C	D	E	F	G	H	I	J/K	L/M	THRU DIA/C'BORE DIA/DEPTH	N/P/Q	THREAD/DEPTH	
<b>A08920</b>	4"x2.6"x.59" (102x66x14.9)	2"x2" (51x51)	40" (1016)	N/A	.28" (7.0)	.87" (22.1)	N/A	.47" (12)	.225"/.225" (5.72/5.72)	.156"/.25"/.150" (4.0/6.4/3.8)	.28"/.20"/2.50" (7.2/5.1/63.5)	#4-40 UNC 2A/.38" (9.6)	.6" (15)
<b>A08922</b>	4"x2.6"x.59" (102x66x14.9)	2"x2" (51x51)	42" (1067)	10" (254)	.39" (9.9)	.87" (22.1)	1.38" (34.9)	.47"/.67" (12/17)	.225"/.225" (5.72/5.72)	.156"/.25"/.150" (4.0/6.4/3.8)	.28"/.20"/2.50" (7.16/5.1/63.5)	#4-40 UNC 2A/.38" (9.6)	.6"/1.2" (15)(30)
<b>A08923</b>	6"x3.5"x.75" (152x89x19.1)	3"x3" (76x76)	40" (1016)	N/A	.32" (8.1)	.87" (22.1)	N/A	.60" (15)	.187"/.187" (4.75/4.75)	.177"/.28"/.165" (4.5/7.1/4.2)	.32"/1.00"/5.00" (8.1/25.4/127)	#6-32/.25" (6.4)	1" (25)
<b>A08924</b>	6"x3.5"x.63" (152x89x15.9)	3"x3" (76x76)	40" (1016)	10" (254)	.46" (11.7)	.87" (22.1)	1.38" (34.9)	.60"/.83" (15/21)	.187"/.187" (4.75/4.75)	.177"/.28"/.165" (4.5/7.1/4.2)	.32"/1.00"/5.00" (8.1/25.4/127)	#6-32/.25" (6.4)	1"/1.5" (25)(38)
<b>A08925</b>	9"x5"x.78" (229x127x19.7)	4"x4.88" (102x124)	37" (940)	N/A	.39" (9.9)	.87" (22.1)	N/A	.68" (17)	.425"/.425" (10.80/10.80)	.250"/.50"/.300" (6.4/12.7/7.6)	.36"/.20"/5.75" (9.1/5.08/151)	#6-32 UNC2A/.38" (9.6)	1" (25)
<b>A08926</b>	9"x5"x.78" (229x127x19.8)	4"x4.88" (102x124)	37" (940)	10" (254)	.55" (13.8)	.98" (24.9)	1.50" (38.1)	.68"/.83" (17/21)	.425"/.425" (10.80/10.80)	.250"/.50"/5.00" (6.4/12.7/7.6)	.36"/.20"/5.75" (9.1/5.08/146)	#6-32 UNC 2A/.38" (9.6)	1"/1.5" (25)(38)

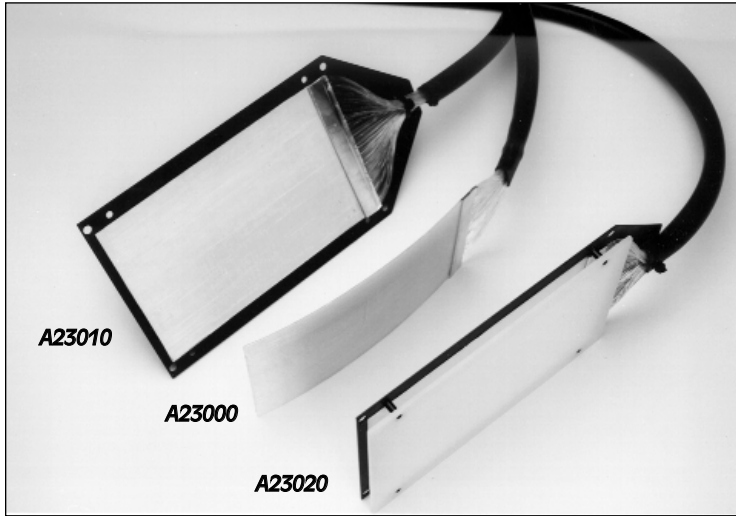
Dimensions in ( ) are in mm

SCHOTT-FOSTEC, LLC  
 62 COLUMBUS ST.  
 AUBURN, NY 13021  
 USA

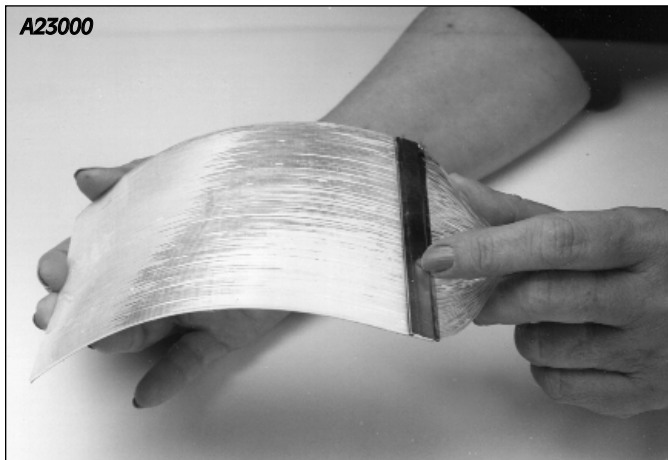
PHONE: +1 (315) 255-2791  
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**SCHOTT**

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PANELite® Backlights



PANELite® Backlight with adhesive back, A23000

## PANELite® Backlights

A versatile addition to the extensive line of our patented backlights

### FEATURES

- ★ Patented process creates diffuse, uniform<sup>†</sup> illumination within the active area.
- ★ Slim profile to fit the most restrictive space requirements.
- ★ Same dependable performance built into three standard configurations.
- ★ Flexible panel (A23000) can create a seamless, curved background.
- ★ When used with a curved diffuser (customer supplied), the "PANELite" backlight is ideal for multiple camera inspection of cylindrical surfaces.
- ★ "PANELite" backlight, A23000 can be trimmed to final size.
- ★ Use with strobes and DCR® series and ACE® series halogen light sources. Other sources, particularly those without an IR filter, may damage the plastic fibers.
- ★ All our dichroic color filters can be used on the products in conjunction with the A08931 backlight color filter adapter. More details can also be found in the Fiber Optic Accessory section of the product catalog.
- ★ 40" (1016)\* flexible fiber bundle.
- ★ Economical - works without a housing.
- ★ IR filter on every unit.
- ★ Available from stock.

<sup>†</sup>Uniformity tolerance varies with size of active area. See technical specifications on reverse side.

### SPECIAL CONFIGURATIONS FOR OEM & VISION INTEGRATORS

- ★ "PANELite" backlights can be manufactured with different active areas, placement of outputs and mounting hole locations. Lead time required. Call for a custom quote.

### TYPICAL APPLICATIONS

- ★ Glass inspection
- ★ Edge detection
- ★ Photography
- ★ Instrumentation display

PANELite® Backlights				
Part No.	Description	Calibrated Area	Panel Size	Overall Thickness
A23000	Flexible, adhesive back	3" x 5" (76 x 127)*	4" x 6" (102 x 152)	.05" (1.3)
A23010	Non-flexible, black anodized aluminum back	3" x 5" (76 x 127)	4.8" x 9" (122 x 229)	.09" (2.3)
A23020	Non-flexible, black anodized aluminum back with acrylic diffuser plate	3" x 5" (76 x 127)	4.8" x 9" (122 x 229)	.5" (12.7)
OPTIONS				
A08931	Color filter adapter	Fits backlight light source adapters with .718" (18.2) diameter input size		

\*Dimensions in ( ) are in mm

# Technical Specifications

Product improvements may result in specification or feature changes without notice.

## PANELite® Backlights

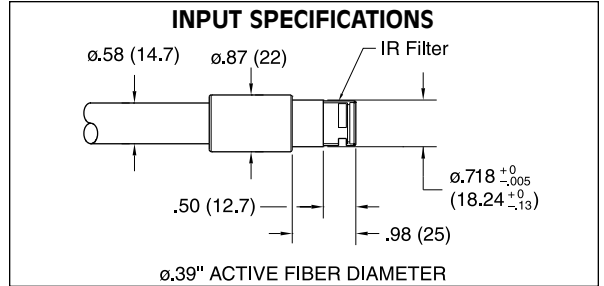
Transmits visible light - from 400nm to 700nm  
Temperature limit 0° to 70°C

### UNIFORMITY SPECIFICATION

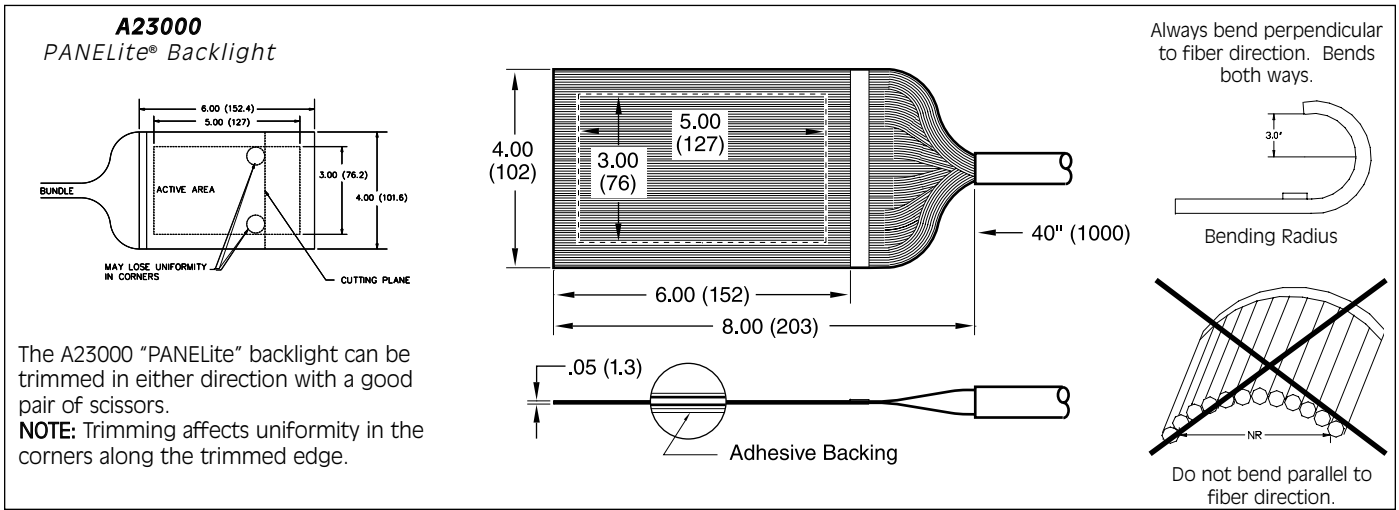
- ★ Area of calibration is 3"x 5" (76 x 127)
- ★ Calibrated to ±15 gray scale levels at a mean of 200, gamma setting of 1.0
- ★ Tested with a .118" (3mm) white acrylic plate, spaced .3" (7.6) from panel.  
(Call manufacturer for set up specification)

**Please Note:** A .3" (7.62) border does not meet this specification on panels larger than 1.5" x 1.5" (38x38).

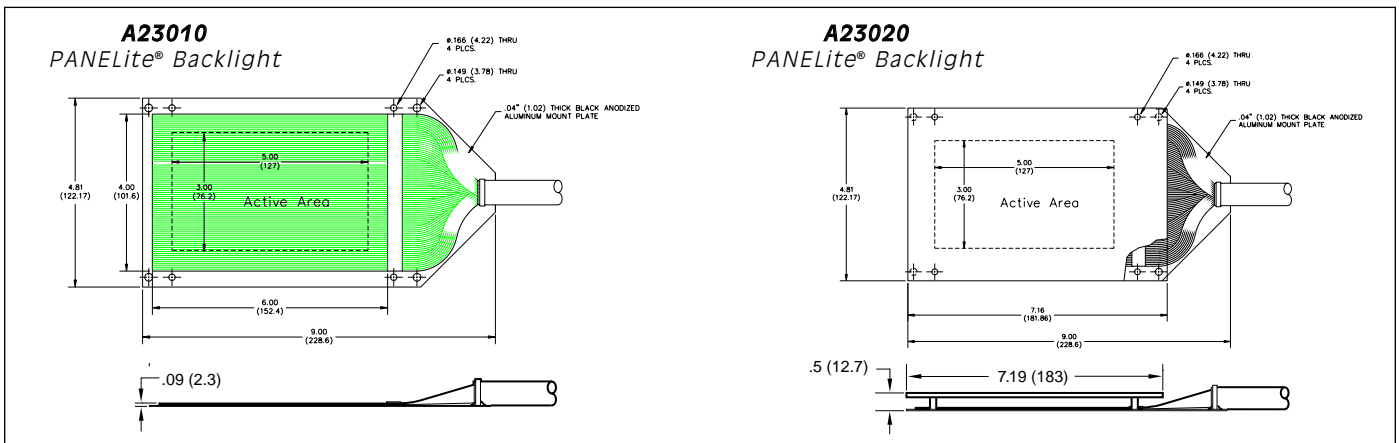
Uniformity specification for custom panels smaller than 1.5" x 1.5" (38 x 38) or larger than 4 "x 6" (102 x 152) will be provided with quote.



All standard PANELite® backlight configurations have the same input dimensions.



The A23000 "PANELite" backlight can be trimmed in either direction with a good pair of scissors.  
**NOTE:** Trimming affects uniformity in the corners along the trimmed edge.



### WARNING:

This product contains plastic fibers. To avoid fiber damage use only with "FOSTEC" or other approved light sources. Do not use input filters or diffusers without a "FOSTEC" adapter. Thermal transfer may cause damage to the fibers. All "PANELite" Backlights have permanent input IR filters which must be kept clean. Clean panels with isopropanol only. OTHER SOLVENTS will damage the fiber and affect uniformity.

Dimensions in ( ) are in mm

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