

# 825A AND 825M PRISMATIC LENSES

## Asymmetrical and Symmetrical Inverted Conical Lenses



Models 825A and 825M Lenses

### Description

These energy efficient 25" diameter inverted conical lens are designed to be used in closed luminaires for industrial and commercial lighting.

### Application

Combining the 825 Reflexor® with the 825A Lens reduces real and apparent brightness and also provides a rectangular asymmetrical distribution specially designed for aisle lighting.

Combining the 825 Reflexor with the 825M Lens allows diffusing and refractive prisms to reduce both real and apparent brightness and also provides a symmetrical distribution.

### Lamp Data

The Models 825A and 825M Lenses are capable of being used with 400 watt HID lamps in enclosed applications. To achieve best uniformity, LexaLite® recommends using coated metal halide lamps. Please reference the LexaLite Reflexor Standard HID Acrylic Application Recommendations for ambient temperature guidelines. Luminaire design, reflector configuration, lamp position and

ambient temperature will affect the inside surface temperature. Thermal tests should be conducted on each luminaire design to confirm appropriate lamp size for the application.

### Ordering Information

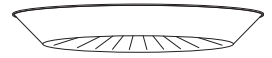
Please call 877-257-5841 for price and delivery. Typical lead time is four to six weeks.

### Service Life

The service life of acrylic lenses is virtually unlimited when used within the recommended temperature limit. Polycarbonate lenses are subject to yellowing especially when used with high ultraviolet output light sources; this effect is enhanced at high temperatures.

### Notice

A.L.P. Lighting Components, Inc. assumes no responsibility for suitability of luminaires and applications. The use of our molded products at excessive temperatures with high UV output light sources will cause degradation of the material. Information regarding the use of lenses and refractors with Metal Halide lamps can be found in the Products/Technical Resources section of our web site at [www.alplighting.com](http://www.alplighting.com).



### Models 825A & 825M Lenses

3" high  
25" diameter

INVERTED CONICAL LENSES

#### MODEL 825A ASYMMETRICAL DISTRIBUTION

Efficiency: 93.3%  
Uplight: 23.8%  
CIE type: Semi-Direct  
Luminaire spacing Criteria:1.7

#### MODEL 825M SYMMETRICAL DISTRIBUTION

Efficiency: 91.2%  
Uplight: 23.3%  
CIE type: Semi-Direct  
Luminaire spacing Criteria:1.5

Materials: Acrylic,  
Acrylic Moon Glow™,  
and Polycarbonate

U.S. Patent No. 4,839,781  
U.S. Patent No. 5,444,606  
Canada Patent No. 1302997  
New Zealand Patent No. 228438  
EU Patent No. 0337351  
Australia Patent No. 608147  
Mexico Patent No. 165.488

800 Series Products:

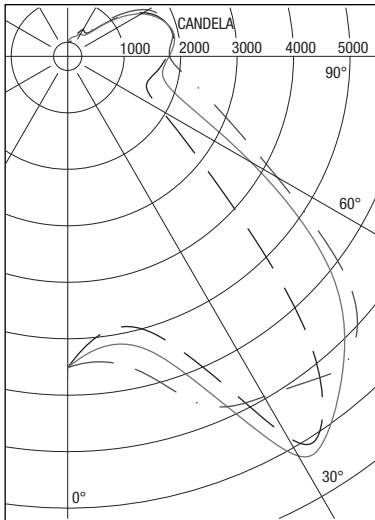
9" Model 809  
11" Model 811  
12" Model 812  
12" Model 812i interface  
12" Model 812 Designer  
16" Model 816  
16" Model 816U lightweight  
16" Model 16CDL Conical Drop Lens  
22" Model 822  
22" Model 822GV lightweight  
22" Model 822i interface  
22" Model 22CDL Conical Drop Lens  
22" Model 22SCDL Silicone Conical Drop Lens  
25" Model 825  
25" Models 825A & 825M Prismatic Lenses



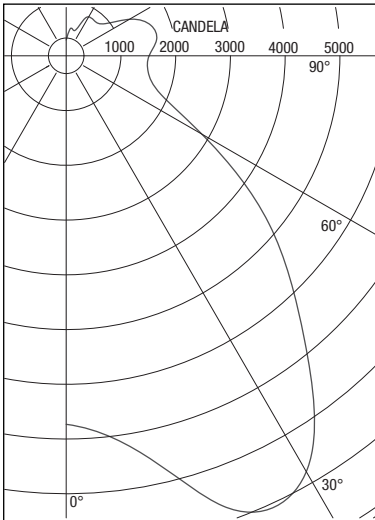
**A.L.P.**  
LIGHTING COMPONENTS, INC.  
WEB SITE: [WWW.ALPLIGHTING.COM](http://WWW.ALPLIGHTING.COM)

 **LEXALITE**

# Models 825A & 825M Lenses



825 Reflexor and 825A Lens  
 Report Number: ITL43428  
 Total Luminaire Efficiency: 93.3 %  
 CIE Type: Semi-Direct  
 Luminaire Spacing Criteria = 1.7 @ 0°  
 Luminaire Spacing Criteria = 1.9 @ 90°



825 Reflexor and 825M Lens  
 Report Number: ITL41464  
 Total Luminaire Efficiency: 91.2%  
 CIE Type: Semi-Direct  
 Luminaire Spacing Criteria: 1.5

**Accessory**

**Stainless steel clamp band**  
 For attachment of bottom closure.

**Materials**

See the LexaLite brand price list for current part numbers and material offerings. Up-to-date and detailed material specifications can be found in the Products/Technical Resources section of our web site at [www.alplighting.com](http://www.alplighting.com).

When using an acrylic Model 825A or Model 825M, the surface temperature of the lens should not exceed 80°C. When using a polycarbonate version, the surface temperature of the lens should not exceed 90°C.

825A & 825M Lenses 03/10

**Photometrics**

The 825 Reflexor® combined with the 825A Lens, using a 400 watt phosphor coated metal halide lamp at a 7.5 inch light center yields a total efficiency of 93.3%. At this light center position, uplight is 23.8% of luminaire (ITL43428).

**Lumen Summary**

Zone	Lumens	%Lamp	%Fixture
0- 30°	5212	14.5	15.5
0- 40°	10064	28.0	30.0
0- 60°	19043	52.9	56.7
0- 90°	25591	71.1	76.2
90-120°	5706	15.9	17.0
90-130°	6853	19.0	20.4
90-150°	7678	21.3	22.9
90-180°	8009	22.2	23.8
0-180°	33600	93.3	100.

**Luminance Data**

**in Candela/SQ M at 0° plane**

Angle	Average
45°	18465
55°	10119
65°	6696
75°	6604
85°	8154

Tested in accordance with IES standards. Lamp is a 400 watt phosphor coated metal halide. Lumen rating = 36000. Lamp center located at 7.5 inches above lower rim.

**Photometrics**

The 825 Reflexor combined with the 825M Lens, using a 400 watt phosphor coated metal halide lamp at a 9.25 inch light center, yields a Spacing Criteria of 1.5 and a total efficiency of 91.2%. At this light center position, uplight is 23.3% of luminaire (ITL41464).

**Lumen Summary**

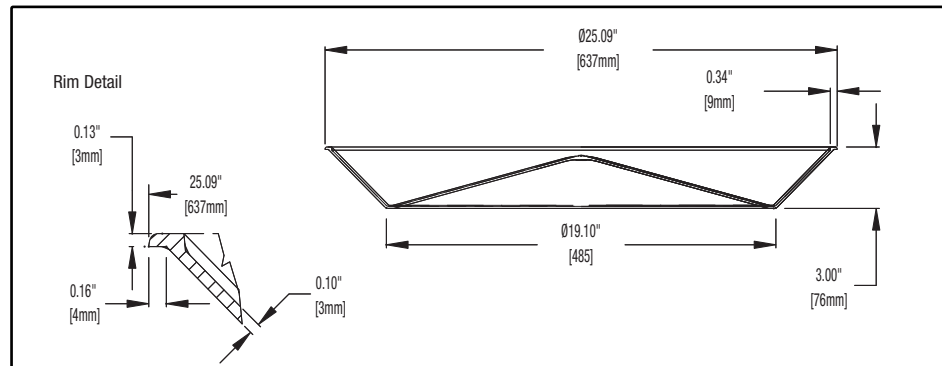
Zone	Lumens	%Lamp	%Fixture
0- 30°	7081	19.7	21.6
0- 40°	11884	33.0	36.2
0- 60°	19719	54.8	60.1
0- 90°	25170	69.9	76.7
90-120°	4999	13.9	15.2
90-130°	5985	16.6	18.2
90-150°	7134	19.8	21.7
90-180°	7654	21.3	23.3
0-180°	32823	91.2	100.

**Luminance Data**

**in Candela/SQ M at 0° plane**

Angle	Average
45°	21231
55°	14754
65°	8578
75°	6579
85°	6902

Tested in accordance with IES standards. Lamp is a 400 watt phosphor coated metal halide. Lumen rating = 36000. Lamp center located at 9.25 inches above lower rim.



**\*Effective June 30, 2010, lenses associated with this product will no longer be UL recognized components. A.L.P. LexaLite recommends the use of open rated lamps with any polymeric lens. These lenses should not be used as arc retention devices.**

**This drawing is for reference only. Actual part dimensions will vary. Customer is urged to review actual samples to confirm fit and function. All specifications and dimensions are subject to change without notice.**

