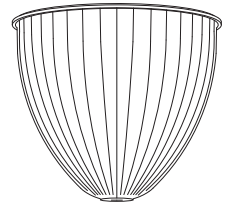


# TEAR DROP REFRACTORS

Models 120 and 121



Model 120



## Models 120 and 121

11.07" high  
13" diameter

GENERAL, STREET AND ROADWAY  
LIGHTING APPLICATIONS

TYPE III AND TYPE V  
DISTRIBUTIONS

Model 120 Type III  
Medium non-cutoff  
Efficiency: 78.87%  
Downward total: 76.27%  
Arc Tube Voltage Rise = 3.8

Materials: Acrylic and polycarbonate

### Description

Models 120 and 121 tear drop refractors are 11.07" high and are 13" in diameter. These refractors are typically used with up to 250W lamps in roadway or nostalgia luminaires. Models 120 and 121 feature smooth exteriors for self cleaning.

### Application

Model 120 is molded of impact resistant polycarbonate, for use in areas where breakage is a concern. Model 121 is molded using ultraviolet stabilized acrylic for high efficiency in general lighting applications.

### Lamp Data

Models 120 and 121 are primarily being used with 250W metal halide and HPS lamps.

### Ordering Information

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

### Service Life

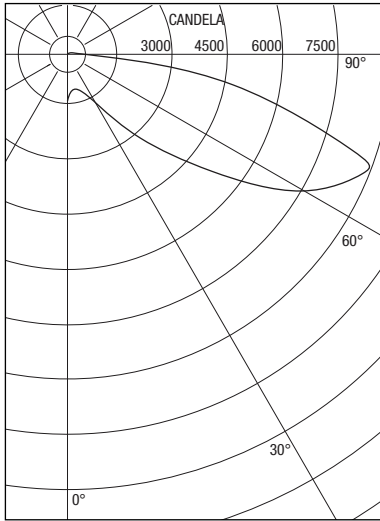
The service life of acrylic refractors is virtually unlimited when used within the recommended temperature limit. Polycarbonate refractors are subject to yellowing especially when used with high ultraviolet output light sources; this effect is enhanced at high temperatures.

### Notice

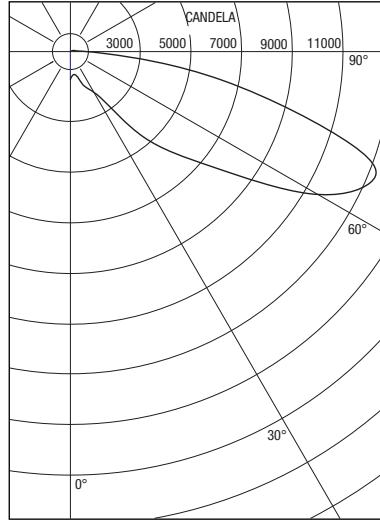
A.L.P. Lighting Components, Inc. assumes no responsibility for suitability of luminaires and applications. The use of our molded products at excessive temperatures with high UV output light sources will cause degradation of the material. Information regarding the use of lenses and refractors with Metal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



# Models 120 and 121



Report Number: ITL50864  
 Luminaire Efficiency = 71.32%  
 Downward total = 68.48%  
 IES Classification: Medium, Non-cutoff, Type III



Report Number: ITL50865  
 Luminaire Efficiency = 78.87%  
 Downward total = 76.27%  
 IES Classification: Medium, Non-cutoff, Type III  
 Arc Tube Voltage Rise = 3.8

## Photometrics:

Models 120 and 121 are available in IES Type III and V distributions. The interior prisms allow for flexibility in obtaining other distributions by the use of reflector baffles and lamp placement. The assembly of the Model 120 Type III, coupled with the aluminum reflector and with a 250W clear BT-28 MH lamp, produces 8911 candela at 69° vertical and 75° lateral. (ITL50864). The assembly of the Model 120 Type III, coupled with the aluminum reflector and with 250W clear ED-18 HPS lamp, produces 13222 candela at 67° vertical and 74.1° lateral. (ITL50865). Individual luminaire performance depends on the lamp center position and the reflector design chosen. Each luminaire design should be individually tested for proper classification. Please call for additional photometric data.

## Accessories

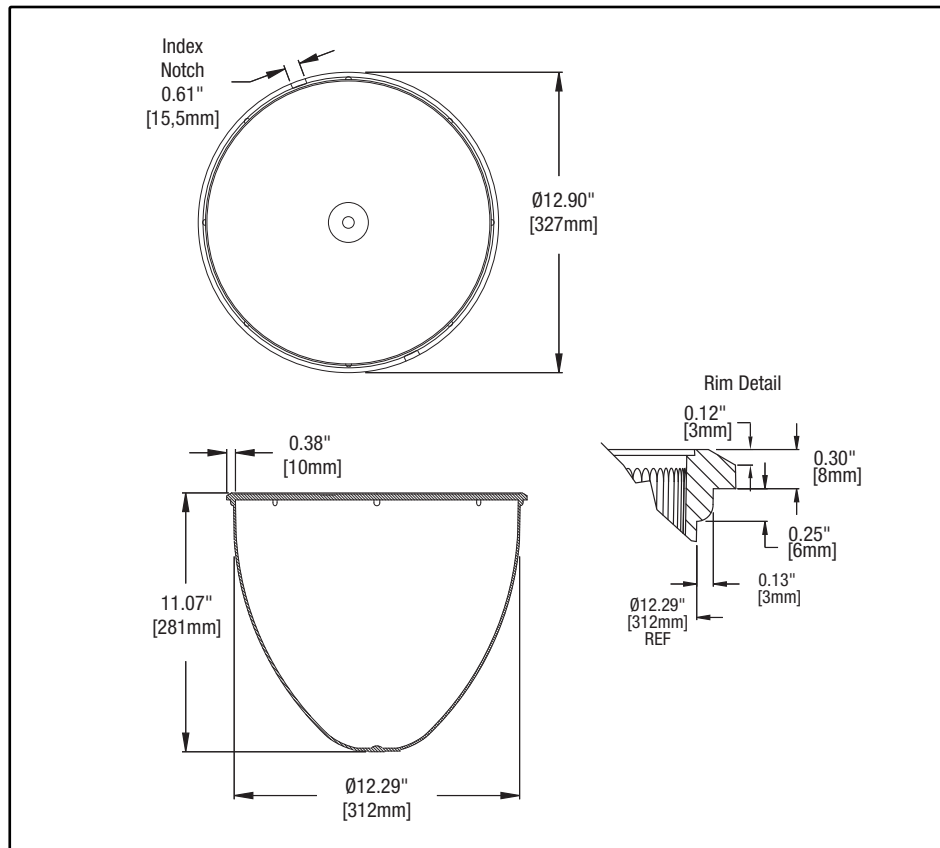
### Aluminum reflector

This 13" diameter faceted reflector increases the efficiency of Models 120 and 121, while reducing arc tube voltage rise potential. The reflector contour also controls the majority of the vertical distribution.

### 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 121, the surface temperature of the refractor should not exceed 80°C. When using a polycarbonate Model 120, the surface temperature of the refractor should not exceed 90°C.



**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.**