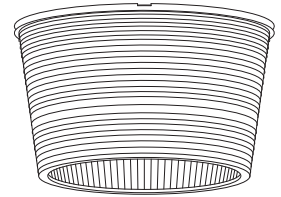


# DUSK-TO-DAWN REFRACTORS

Models 280, 285, 290, 295 and 297



Model 290 Type V



## Model 280, 285, 290, 295 and 297

6.88" high  
12" diameter

ROADWAY, STREET, AREA,  
COMMERCIAL, INDUSTRIAL AND  
DECORATIVE LIGHTING  
APPLICATIONS

Model 295 Type V  
Efficiency: 85.26%  
IES Classification: Type V, Semi-cutoff,  
Arc Tube Voltage Rise = 0

Material: Acrylic and polycarbonate

## Description

These 12" diameter straight-sided refractors are recommended for applications requiring low cost. They are designed for use with vertical burning lamps and are used in residential, post top and street lighting applications. Open bottom refractors provide relamping and maintenance ease, while closed bottom refractors provide additional protection for the light source. Models 280 (closed bottom) and 285 (open bottom) are molded of polycarbonate for use in areas where breakage is a concern. Models 290 (closed bottom) and 295 (open bottom) and 297 lightweight (open bottom) are molded of ultraviolet stabilized acrylic for high efficiency in general lighting applications.

## Lamp Data

Vertical burning HID lamps up to 175W may be used with all models. Models 285, 295 and 297 may be used with up to 250W HID lamps in outdoor applications. Thermal tests should be conducted on each luminaire design, with the proposed light source in its selected position to confirm lamp size and suitability, and to predict service life of the refractor.

## Ordering Information

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

## Service Life

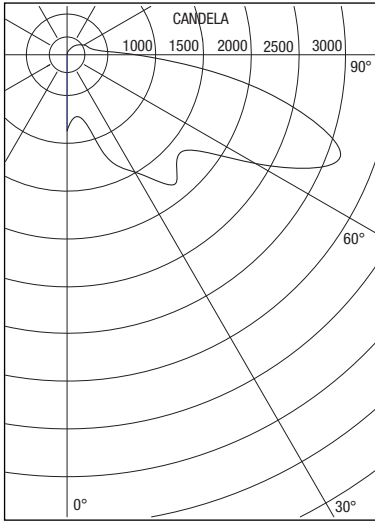
The service life of acrylic refractors is virtually unlimited when used within the recommended temperature limit. Polycarbonate refractors are subject to yellowing especially when used with high ultraviolet output light sources; this effect is enhanced at high temperatures.

## 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 280, 285, 290, 295 and 297



## Photometrics:

All models are available in an IES Type V symmetrical distribution for general area lighting. Model 297 is also available in a Type II, III and IV two-way, asymmetrical distribution for street parking or interior aisle lighting. Model 295 Type V produces a maximum of 3133 candela at 70° vertical with an overall efficiency of 85% with a 150W HPS lamp, as shown at left (ITL42090). 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.

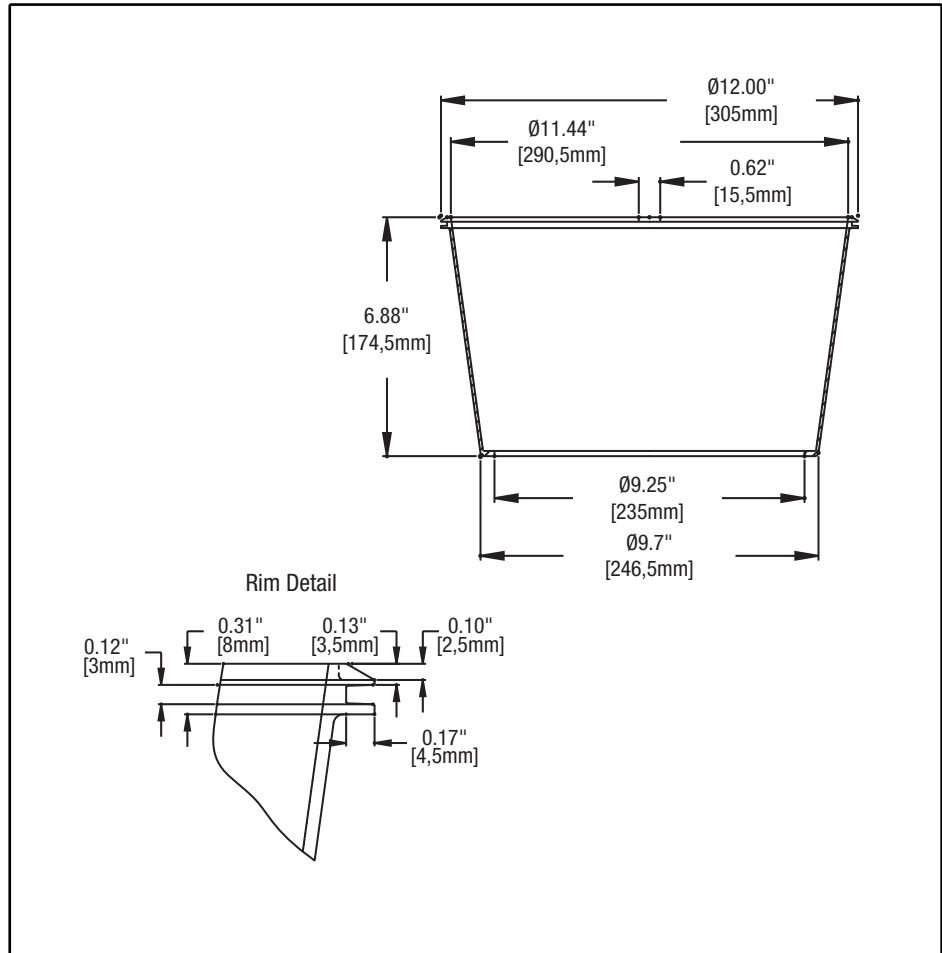
Report Number: ITL42090  
 Total Luminaire Efficiency = 85.26%  
 IES Classification: Type V, Semi-cutoff  
 Arc Tube Voltage Rise = 0.0

## 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).

UvaLex® is LexaLite's proprietary treatment to retard yellowing in ultraviolet environments and is standard on these polycarbonate refractors.

When using acrylic Models 290, 295 and 297 the surface temperature of the refractor should not exceed 80°C. When using polycarbonate Models 280 and 285, 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.**