

Outdoor Environmental Lighting Product Guide

Volume II



Architectural | Commercial | Roadway
Lighting Solutions

☆☆ Holophane has gone to great lengths to develop luminaires that provide true choice in optical performance. ☆☆

Introduction

HOLOPHANE®

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Today's outdoor lighting needs present new challenges for those involved with lighting the nighttime environment. Without compromise, strong consideration must be made to providing safety and security, yet awareness of reducing light pollution and trespass should also be strongly considered in many communities.

Given the variety of lighting objectives associated with different outdoor applications, Holophane has gone to great lengths to develop luminaires that provide true choice in optical performance. Specifically, luminaire families have been developed to provide a choice of varying degrees of "cutoff", different amounts of controlled uplight (or no uplight), multiple distributions, and distinctive effects. In addition, decorative covers and internal shields are available and work effectively to significantly reduce the unwanted uplight and "spill" light.

The following guide provides the great variety of outdoor lighting products that Holophane has available for communities conscious about reducing light pollution and trespass without compromise of safety, security, commerce, style, and public prestige.



The simulations above visually emphasize the different considerations one must give to luminaire selection for differing applications. The lighting performance must complement the environment and its activities within the space. For example, the top residential simulation would typically be more sensitive to higher light levels and light trespass than the bottom urban simulation.

Communities all over the world make decisions to light their nighttime environment, very often, with specific goals and objectives for the outcome. Importantly, the tasks and activities differ considerably from place to place.

The goal to provide increased safety and security for nighttime activity can drive a need for lighting. Also, revitalization of cities, towns, boulevards, shopping districts, and residential developments for inspired community spirit and increased public recognition has driven new lighting installations. Authorities light roadways, ports, and yards to provide adequate visibility for the purposes of improved productivity, as well as safety and security. Often, people will install outdoor lighting for increased commerce or attracting nighttime attention to sell goods and services, while others want just enough lighting to deter crime and vandalism. Furthermore, nighttime venues that host concerts and sporting events require specific types of lighting. Lastly, lighting monuments, landscapes, or signage may have specific needs and requirements.

Given the vast amount of activities that take place in our nighttime environment and the varying objectives associated with each project, it is essential that lighting decision-makers have luminaire choices specific to optical and mechanical performance, purpose, and appearance. Ultimately, this will allow for the ability to best choose a system that will most effectively illuminate a specific environment.

- No direct uplight component
- Excellent light control at property line
- Limits spill light
- Reduces glare

IESNA Full Cutoff Luminares

HOLOPHANE®



Full Cutoff — A luminaire light distribution with zero candela (intensity) at an angle of 90 degrees or above. Additionally, the candela per 1000 lamp lumens does not exceed 100 (10%) at a vertical angle of 80 degrees.

Benefits:

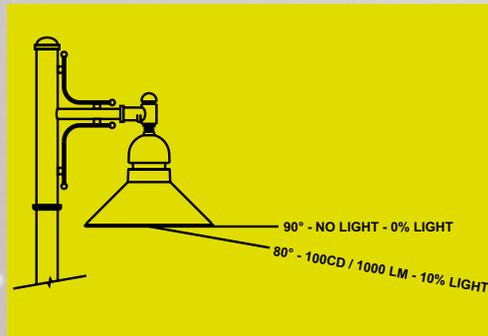
- Perceived reduction in “sky glow”
- Excellent light control at property line
- Limits spill light
- Reduces glare

Uplight:

- No uplight allowed

Limitations:

- Reduces pole spacing
- Increases pole and luminaire quantity
- Least cost effective of all cutoff categories
- Concentrated down light component results in maximum reflected uplight
- Potential to have decreased uniformity due to higher light levels directly under the pole





Memphis/Esplanade® (sag glass)
with shallow skirt



Memphis/Esplanade® (sag glass)
with deep skirt



Port Huron® (prismatic bowl)
with deep skirt



Pedestrian (sag glass)
with shallow skirt



Hallbrook® Extended



Pedestrian (sag glass)
with deep skirt



HMSD (High Mast)



HMSP (High Mast)



Somerset®



MirroStar®



PoleStar® II



Mongoose®

Potential for increased pole spacing and lower overall power consumption when compared to full cutoff

IESNA Cutoff Luminaires

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Cutoff — A luminaire light distribution where the candela per 1000 lamp lumens does not exceed 25 (2.5%) at an angle of 90 degrees or an angle above. Additionally, the candela per 1000 lamp lumens does not exceed 100 (10%) at a vertical angle of 80 degrees.

Benefits:

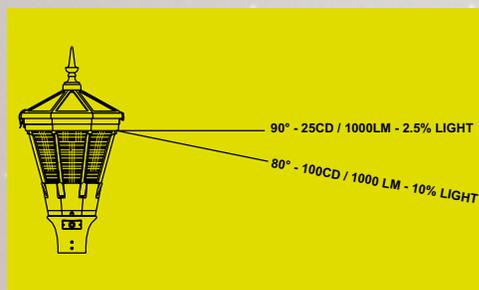
- Small increase in vertical light compared to full cutoff
- Good light control at property line
- Potential for increased pole spacing and lower overall power consumption when compared to full cutoff

Uplight:

- From as little as 0% to a maximum of 16%

Limitations:

- May allow some uplight
- Light control at property line less than full cutoff





GranVille® Lunar Optics*



Washington Lunar Optics*



Madeira® Lunar Optics™



Tucson Lunar Optics™



Memphis®



Esplanade®



Boardwalk®



Port Huron®



Port Huron® / Boardwalk®
with shallow skirt



Memphis/Esplanade®
with shallow skirt



Memphis/Esplanade®
with deep skirt



Pedestrian
with deep skirt



Pedestrian
with shallow skirt



Arlington®



Jefferson



RSL-350®

*Decorative covers and internal shielding available for entire series

It is essential that lighting decision-makers have luminaire choices specific to optical and mechanical performance, purpose, and appearance.

IESNA Cutoff Luminaires Continued

HOLOPHANE®



Harp Series



Lantern Series



Bern®



Prague®



Mongoose®



Hallbrook®



HMSC®



HMSD



HMSP



PoleStar® II



RSL-350



Mongoose



Milwaukee Harp



Mongoose



Teardrop Series



PoleStar II

☆☆ Potential for increased pole spacing and lower overall power consumption when compared to full cutoff or cutoff ☆☆

IESNA Semi-Cutoff Luminaires

HOLOPHANE®



Semi-Cutoff — A luminaire light distribution where the candela per 1000 lamp lumens does not exceed 50 (5%) at an angle of 90 degrees or an angle above. Additionally, the candela per 1000 lamp lumens does not exceed 200 (20%) at a vertical angle of 80 degrees.

Benefits:

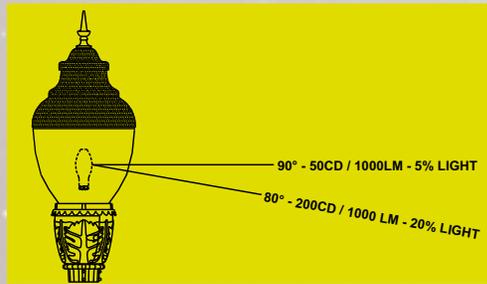
- Potential for increased pole spacing and lower overall power consumption when compared to full cutoff or cutoff
- High angle light accents taller surfaces
- Generally, less reflected light off pavement than full cutoff or cutoff luminaires
- Vertical illumination increases pedestrian sense of security and safety.

Uplight:

- Less than 1% to a maximum of 32%

Limitations:

- Greater potential for direct uplight component than cutoff
- Light trespass a concern near residential areas
- Increased high angle light compared to full cutoff or cutoff





Tucson Series



Arlington®



Jefferson®



Boardwalk®



Port Huron®



Lyon®



Vienna®



Syracuse



Bern®



Prague®



Mongoose®



HMSP



HMST



HMSP



PoleStar® II



RSL-200

Summary

Over the last 105 years, Holophane has brought the lighting community optical devices and luminaires that have promoted visibility, energy efficiency, and reliability. Today, Holophane looks forward to the new challenges associated with balancing traditional outdoor lighting needs with the new concerns of light pollution.

All Holophane outdoor luminaires are optically and mechanically engineered with a specific purpose so as to fulfill the needs of our vast customers base. Our priority is to provide the lighting community with luminaires that provide results that are unmatched by anyone in the industry.

In all settings, Holophane strives to design, develop, and manufacture lighting systems that create a warm, pleasant, and exceptionally well-illuminated environment that promotes safety, security, and commerce.



HOLOPHANE[®]
LEADER IN LIGHTING SOLUTIONS

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HL-2064 6/03 ©2003 Acuity Lighting Group, Inc

Printed in USA