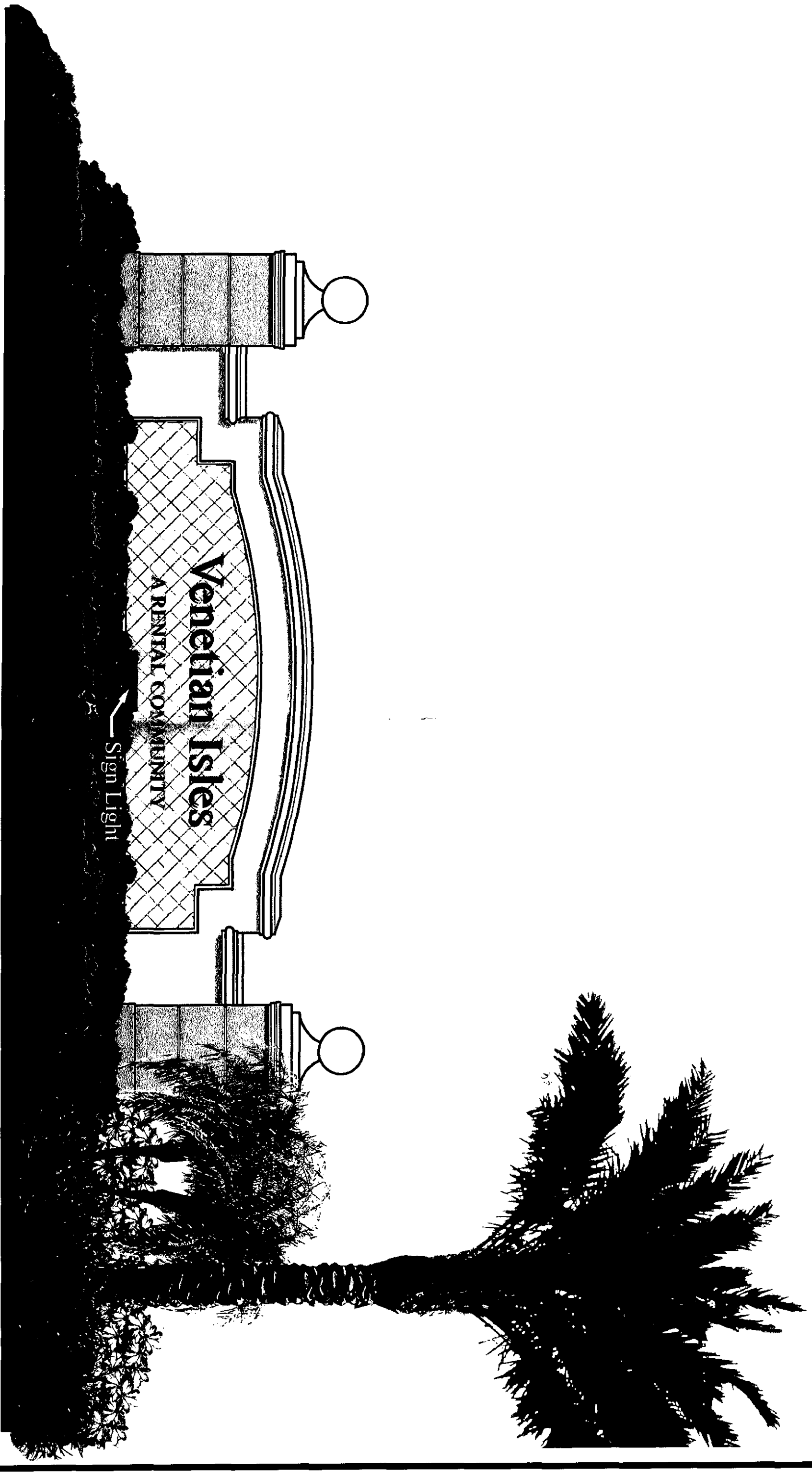


TAB

GA



SOUTH CONGRESS AVENUE SIGN

LAKE PARK, FLORIDA

DATE: 12.16.03
SCALE: 1" = 1/2' - 0"



PARK AVENUE SIGN

LAKE PARK, FLORIDA

DATE: 12.16.03
SCALE: 1"=1'-0"



NORTH CONGRESS AVENUE SIGN

LAKE PARK, FLORIDA

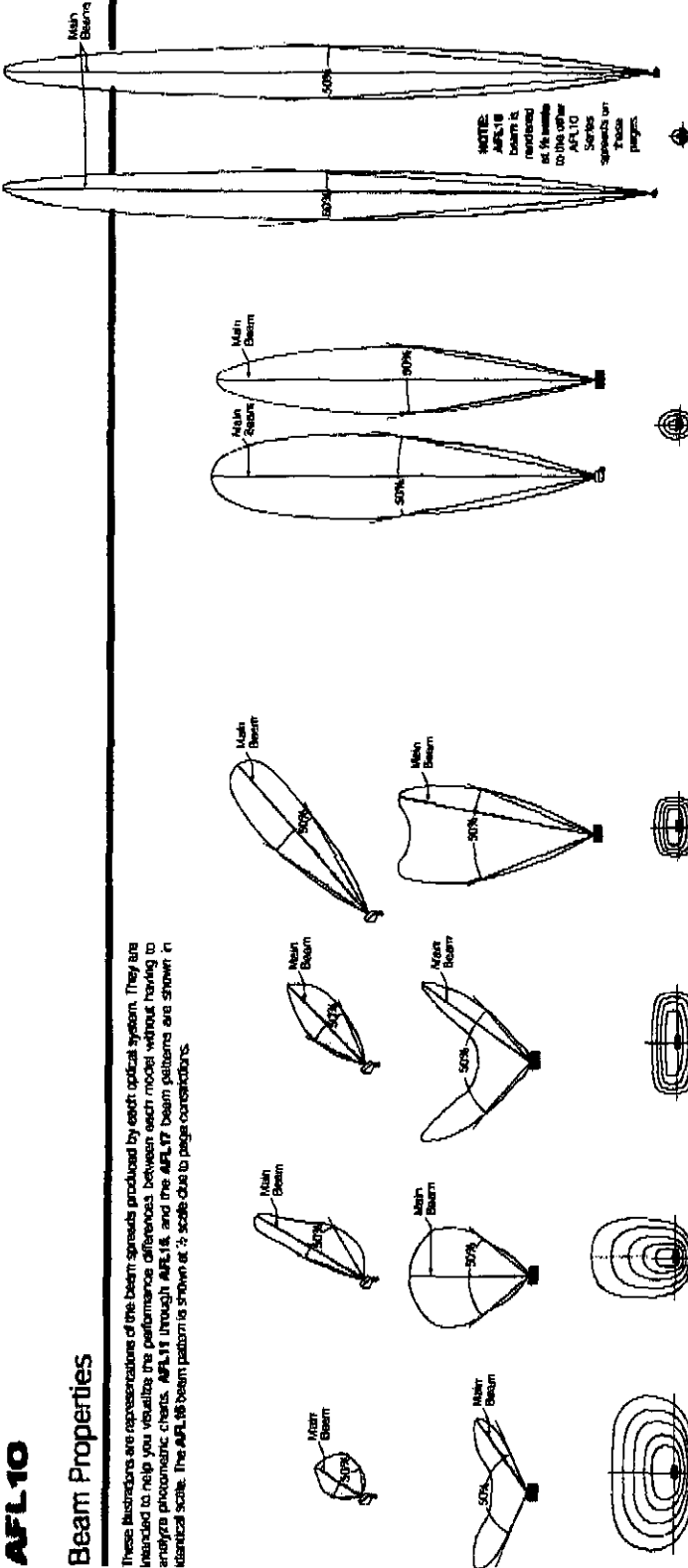
Sign Light

DATE: 12.16.03
SCALE: 1" = 1/2' - 0"

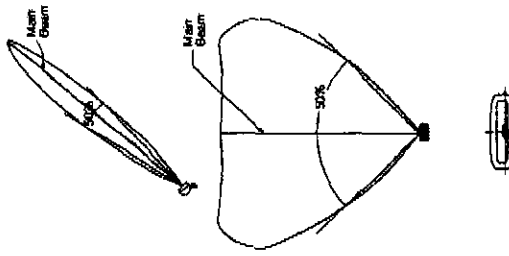
AFL10

Beam Properties

These illustrations are representations of the beam spreads produced by each optical system. They are intended to help you visualize the performance differences between each model without having to analyze photometric charts. AFL11 through AFL14, and the AFL17 beam patterns are shown in a vertical scale. The AFL18 beam pattern is shown at 2/3 scale due to page constraints.

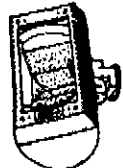


AFL10



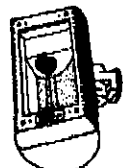
AFL11 Wide Flood

The AFL11 horizontal beam pattern is designed to illuminate surfaces that are more horizontal than vertical or wide areas when well mounted. The AFL11 is designed for best illumination with the fixture relatively close to the light surface and maintains excellent uniformity throughout its beam pattern. Recommended distance from the light surface is 4' to 20' depending on lamp and wattage.



AFL12 Vertical Flood

The AFL12 vertical beam pattern is designed to illuminate surfaces when grade included or deeper areas when well mounted. Recommended distance from the light surface is 6' to 20' with low aiming angles generating excellent uniformity of illumination.



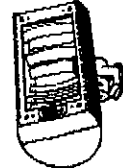
AFL13 Medium Flood

The AFL13 is designed to bridge the gap between wide and narrow flood distributions. It is a mid-range luminaire designed for lighting surfaces from distances of 6' to 20' with low aiming angles generating excellent uniformity of illumination.



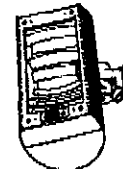
AFL14 Narrow Flood

The AFL14 bridges the gap between medium flood and spot distributions. It is a mid-range luminaire designed for lighting architecture from distances of 15' to 40' with low aiming angles. Generating excellent uniformity of illumination, it can also be used in combination with other AFL10 Series models to extend their range or reshape the overall light pattern.



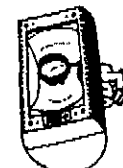
AFL15 Spot

The AFL15 spot reflector is a concentrated beam designed to light objects which are 20' to 50' from the fixture. It may also be located close to a building where the effect of grazing light is desired to show surface texture, or to highlight reliefs and projections.



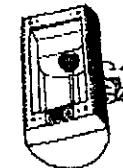
AFL16 Narrow Spot

The AFL16 narrow spot beam pattern is designed to illuminate and highlight small architectural details, tree tops and pagodas from long distances. Recommended distance from the luminaire surface is 20' to 100', depending on lamp and wattage.



AFL17 Horizontal Spot

The AFL17 horizontal spot reflector is ideal for illuminating surfaces with wide horizontal and relatively short vertical dimensions to intensities similar to the AFL15 Spot reflector. Its wide horizontal pattern also allows the AFL17 to be located close to a building where the effect of grazing light is desired to show surface texture, or to highlight reliefs and projections. It can also be used in combination with other AFL10 Series models to extend their range or reshape overall beam patterns.

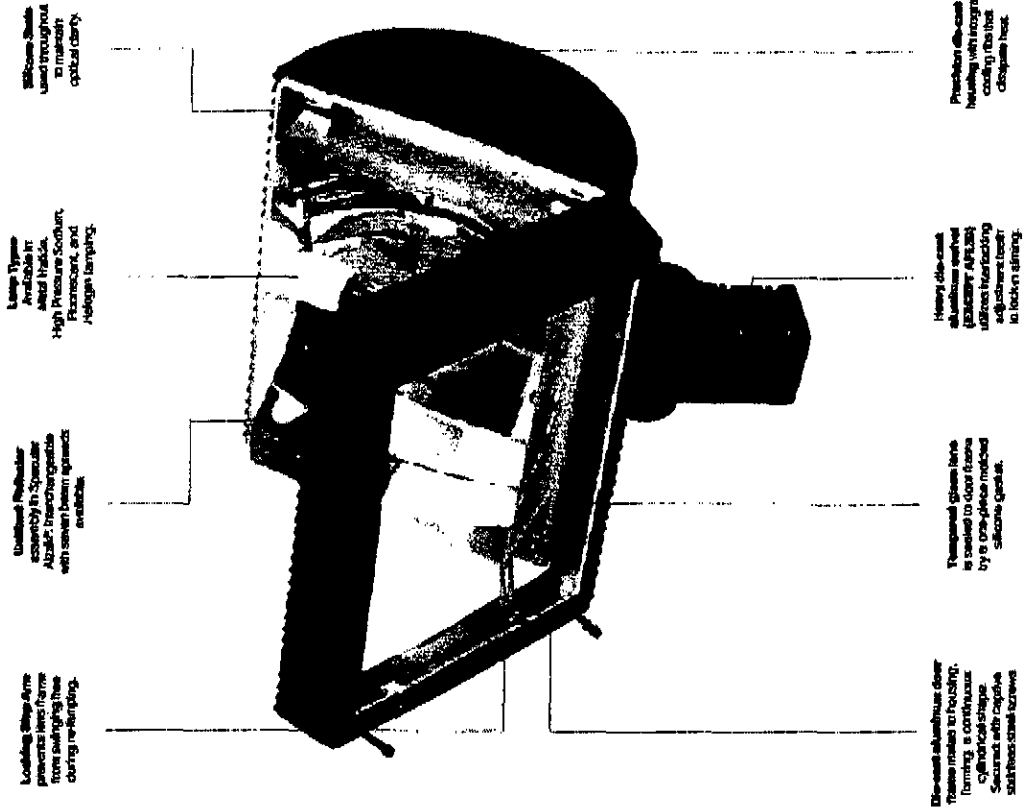


Optical Matrix

This page reflects Kim's recommendations regarding the optimum optical system / accessory combinations throughout the Kim Floodlighting Family.

Series	Wide Flood	Vertical Flood	Medium Flood	Narrow Flood	Spot	Narrow Spot	Horizontal Spot
CFL	CFL1					CFL6	
Lamp Type							
50 - 70 watt H.I.D.	•					•	
13 - 42 watt Fluorescent	•						
80 watt Incandescent	•						
150 watt Halogen	•						
Fixture Options							
Beam Doors	•						
Fixed Hood							
Full Shield							
AFL10	AFL11	AFL12	AFL13	AFL14	AFL15	AFL16	AFL17
Lamp Type							
70 - 175 watt H.I.D.	•	•	•	•	•	•	•
500 watt Halogen	•	•	•	•	•	•	•
Fixture Options							
Beam Doors	•	•	•	•	•	•	•
Fixed Hood	•	•	•	•	•	•	•
Full Shield	•	•	•	•	•	•	•
Leanin Shield	•	•	•	•	•	•	•
Grid Louver	•	•	•	•	•	•	•
Color Filter Assembly	•	•	•	•	•	•	•
AFL20	AFL21	AFL22	AFL23	AFL24	AFL25	AFL26	AFL27
Lamp Type							
250 - 400 watt H.I.D.	•	•	•	•	•	•	•
Fixture Options							
Beam Doors	•	•	•	•	•	•	•
Fixed Hood	•	•	•	•	•	•	•
Full Shield	•	•	•	•	•	•	•
Leanin Shield	•	•	•	•	•	•	•
Grid Louver	•	•	•	•	•	•	•
Color Filter Assembly	•	•	•	•	•	•	•
AFL30	AFL31	AFL32	AFL33	AFL34	AFL35	AFL36	AFL37
Lamp Type							
750 - 1000 watt H.I.D.	•	•	•	•	•	•	•
Fixture Options							
Beam Doors	•	•	•	•	•	•	•
Fixed Hood	•	•	•	•	•	•	•
Full Shield	•	•	•	•	•	•	•
Grid Louver	•	•	•	•	•	•	•

Mechanical Highlights



Locking Ring Arms prevent the frame from swinging free during re-lamping.

Universal Reflector assembly is Standard. Also, interchangeable with seven beam spreads available.

Lamp Type Available in: High Pressure Sodium, Fluorescent, and Halogen lamps.

Silicone Grease used throughout to maintain optical clarity.

Die-cast aluminum cover frame makes re-focusing, turning, is continuous cylindrical shape. Secured with negative self-tapping screws.

Tempered glass lens is sealed to cover frame by a one-piece molded silicone gasket.

Heavy die-cast aluminum cover (patented AFL30) allows fast and easy adjustment to lock in aiming.

Precision die-cast housing with integral cooling fins dissipate heat.

Floodlighting Application

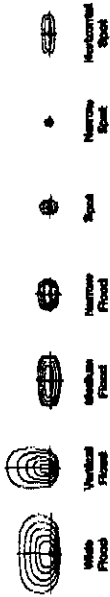
System Approach

Non-Architectural Floodlighting
Systems are engineered to produce the specific distribution required to illuminate horizontal and vertical surfaces from mounting heights. This differs greatly from sports fields, floodlighting equipment, where long distances (ball mounting heights) and considerable distribution overlap are utilized. In general floodlighting, color, control of glare and special effects are not considered important design criteria. Heater or these systems produce efficient illumination for the Architectural Environment.

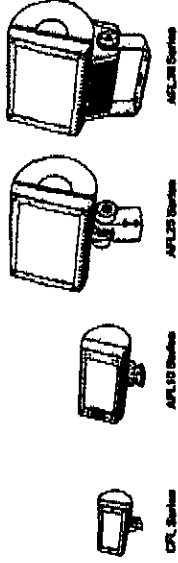
Architectural Floodlighting
demands close luminaires-to-surface distances and minimal distribution overlap to reduce the number of fixtures required. Architectural features often obscure luminaire locations that are less than ideal, requiring special optical features.

To satisfy these requirements, **Architectural Floodlighting** demands a wide range of beam distributions. Further, the need to control unwanted lamp visibility, or to produce special architectural effects, such as streaming and surface grazing, require specialized optical systems and accessories.

Several Different Optical Beam Distributions produce the required range to illuminate virtually any surface from very close to long distances.



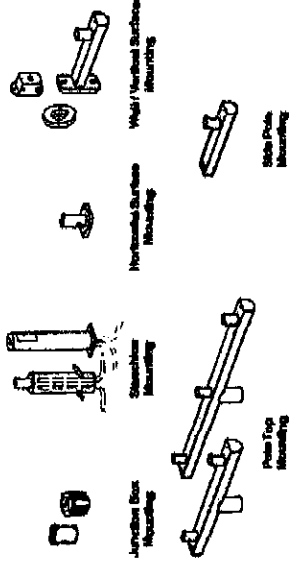
Four Luminaire Glare provides a range of the most compact beam sizes for the required range. From the smallest (CFL) in incandescent, halogen, compact fluorescent and H.I.D. lampings to 70 watt, to the largest (FLX-10) in H.I.D. lampings up to 1000 watt.



Accessories, controlling unwanted lamp visibility, protecting the luminaire from vandalism, or reducing spill light in light spooling distributors, make fine-tuning luminaires to special applications requirements possible. See pages 8-9 for additional details.



Min provides the widest range of **Mounting Options** to assure that each luminaire can be mounted rigidly to preserve aiming and provide years of trouble-free service.



NOTE: Refer to individual series information for specific option and accessory availability.

Glare Control

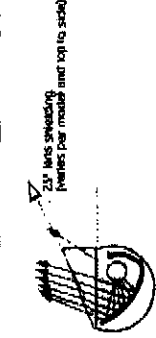
Glare Control Accessories

After placing fixtures where they can best illuminate the targets, it is necessary to reduce the visibility of the lamp and optical system by the occupant. The use of an appropriate glare control accessory, such as barn doors, fixed hoods, full shields, or grid louvers, reduce objectionable glare.



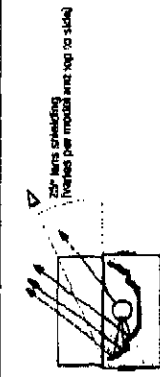
Barn Doors
Most effective when used with flood or medium flood distributors.

Barn doors provide some control of lens visibility from the side and slight lens or the back. Adjustable panels provide a degree of customization in a fixed distributor. Barn doors are not used for "grazing" light distributors.



Fixed Hoods
Most effective when used with narrow flood or spot distributors.

Fixed hoods provide control of visibility from top or bottom views of the lens only, while preventing an obstruction in the opposite direction.



Full Shields
Most effective when used with narrow flood or spot distributors where visibility is from all sides of the fixture.

Full shields will provide good control of lens visibility, as well as preventing of spill light from the lens surface.

Grid Louvers

Grid louvers include baffles inside a full shield. These additional components cut lens and reflector visibility considerably. However, grid louvers cannot be applied to all optical systems designs. Grid louver designs are matched to specific optical systems. The characteristics of the optical system dictate how many louvers can be used and, at what angle they must be placed.



Grid Louvers
Used to specific optical systems.

Grid louvers, specifically designed for narrow flood reflectors, are applied to prevent obstruction of reflector output.



Grid louvers for wide and narrow spot distributors utilize straight vanes and special vanes for use with other distributors.

Architectural Floodlights

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Photometrics - See separate AFL Photometrics Catalog in Photometrics Booklet of Specifications CD or for www.hillighting.com

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CFL pages 23-33

50 - 70 watt H.I.D.
13 - 42 watt Compact Fluorescent
60 watt Incandescent
150 watt Halogen
CFL1 Wide Flood
CFL1 Narrow Spot



AFL10 pages 35-55

70 - 175 watt H.I.D.
500 watt Halogen
AFL11 Wide Flood
AFL12 Vertical Flood
AFL13 Medium Flood
AFL14 Narrow Flood
AFL15 Spot
AFL16 Narrow Spot
AFL17 Horizontal Spot



AFL20 pages 57-75

250 - 400 watt H.I.D.
AFL21 Wide Flood
AFL22 Vertical Flood
AFL23 Medium Flood
AFL24 Narrow Flood
AFL25 Spot
AFL26 Narrow Spot
AFL27 Horizontal Spot



AFL30 pages 77-94

750 - 1000 watt H.I.D.
AFL31 Wide Flood
AFL32 Vertical Flood
AFL33 Medium Flood
AFL34 Narrow Flood
AFL35 Spot
AFL36 Narrow Spot
AFL37 Horizontal Spot

