

AL4 Series

Spectra IV Area Luminaire, 400-1000W HID

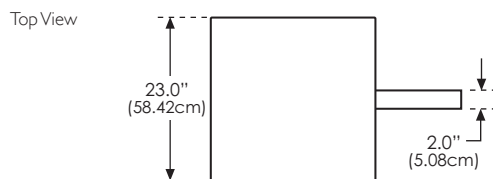
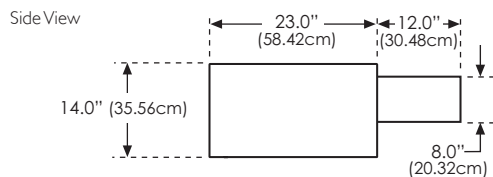
Type:	Job:	Approvals:				
Catalog Number:						Date: Page 1 of 6
Series/Source-Wattage	Optics (Distribution)	Voltage	Mounting	Options (Factory Installed)	Finish	Accessories (Field Installed)

Overall Dimensions

For Reference Only

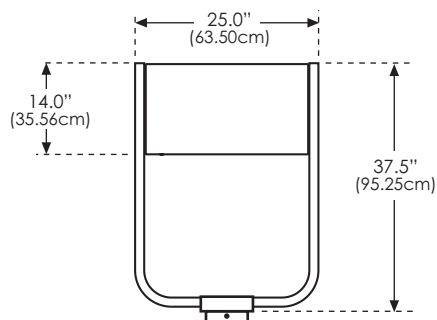
AL4

arm mount (SS) Surface Arm Mount to Square Pole (standard)



AL4

post top yoke mount (PT(X)R)



EPA Effective Projected Area in Ft²

	Number of Fixtures			
	1	2	3	4
Arm Mount (SS/SR)	3.6	7.3	8.8	8.8
Post Top Mount (PT(X)R)	3.6	N/A	N/A	N/A

See Mounting Configuration chart on page 3.

Weight

90 lbs. (40.82 kgs)

Specifications

Housing

Formed aluminum sheet metal housing and top. The sides and top shall be mechanically and chemically sealed to ensure a rain-tight seal. Standard unit constructed to IP54.

Optical Module

Rotatable multi-faceted segmented reflectors shall be made of high purity, anodized aluminum. Optical assemblies shall be field rotatable at 90° increments and exchangeable.

Vertical lamp orientation and flat glass lens allow the AL4 Series (Spectra IV Area Luminaire) to provide optics meeting the IES definitions of Full Cutoff.

Dark Sky Ordinance compliant.

Lamp Access

Door frame shall be mitered anodized aluminum extrusion, gasketed to ensure a positive seal to the housing.

Lens

Lens shall be tempered glass to withstand thermal and physical shock. (Available with flat glass lens only.)

Socket

A porcelain, 4KV pulse-rated, grip-type, mogul base socket shall be used to prevent lamp loosening and to maintain proper lamp positioning. (1000W HPS socket is 5KV pulse-rated.) Stabilux lamp socket is standard and provides added protection to reduce lamp breakage due to mechanical shock and vibration.

Ballast

Ballast shall be high power factor with reliable starting at temperatures as low as -29°C (-20°F) for Metal Halide, -34°C (-30°F) for Pulse Start Metal Halide, and -40°C (-40°F) for High Pressure Sodium.

Crest factor does not exceed 1.8. Class H, 180°C (356°F) rated insulation system.

Mounting

Surface arm mount (field installed) shall be of heavy gauge extruded aluminum. Threaded tension rods shall be used to bolt to square (standard) or round poles. Optional post top mount shall allow fixture to be mounted to square or round poles or tenons.

Additional mounting options include an adjustable arm mount, an adjustable mastfitter, and pole top tenon adapters with arm mount for round poles.

Finish

Finish color options include Satin Aluminum, Black, Dark Bronze, White, Grey and Green. Finishes are a polyester powder coating, 2.5 mil nominal thickness, electrostatically applied and oven cured to ensure extreme durability. Other colors may be specified. Decorative striping option also available.

Listings

ETL/cETL listed to the UL 1598 standard, suitable for Wet Locations. The quality systems of this facility have been Registered by UL to the ISO 9000 Series Standards.

Warranty / Terms and Conditions

Mechanical, finish and electrical shall be covered by a limited 3-year warranty.

The current Philips Wide-Lite Warranty may be found at www.wide-lite.com (keyword: warranty) as well as the current Standard Terms and Conditions of Sale (keyword: terms).

All sales of items in this catalogue shall be subject to the Philips Wide-Lite Standard Terms and Conditions of Sale current at the time of shipment. If you do not have a copy of the Philips Wide-Lite Warranty and Standard Terms, please contact the factory for same prior to ordering.



Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled 'Contain Mercury' and/or with the symbol 'Hg'. Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycle and disposal can be found at www.lamprecycle.org.

Philips Wide-Lite reserves the right to change specifications and dimensions without notice. Lamp and electrical specifications / availability subject to change by manufacturer without notice. Please refer to detailed specification sheets for additional information and spec details.

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Bulletin No. WLSP0127G0412







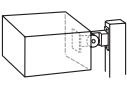
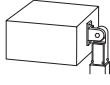
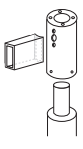

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Series/Source-Wattage	Optics (Distribution)	Voltage	Mounting ²
Metal Halide <input type="checkbox"/> AL4M-1000² Pulse Start Metal Halide <input type="checkbox"/> AL4P-400 <input type="checkbox"/> AL4P-450 <input type="checkbox"/> AL4P-750 <input type="checkbox"/> AL4P-875 <input type="checkbox"/> AL4P-1000 	Vertical lamp Full Cutoff, Flat Glass <input type="checkbox"/> 3F Type III  <input type="checkbox"/> 4F Type IV Forward Throw with internal house side shield  <input type="checkbox"/> 5F Type V Square 	<input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 240 <input type="checkbox"/> 277 <input type="checkbox"/> 480 <input type="checkbox"/> QV¹	<input type="checkbox"/> SS Surface arm mount to square pole (standard)  <input type="checkbox"/> SR(X)³ Surface arm mount to round pole Mounting edge of arm is contoured to match pole radius.  <input type="checkbox"/> SA2⁴ Adjustable arm mount to square pole Includes transition plate.  <input type="checkbox"/> MA2 Adjustable mastfitter mount to 2-3/8" O.D. tenon Includes transition plate.  <input type="checkbox"/> RTA-(X)-(Y)^{5,6} Round pole tenon adapter Slipfitter for Round Pole with 2.375" O.D. x 4" vertical tenon, 6" arm included.  <input type="checkbox"/> PT(XY)⁷ Post top yoke mount 

Options (Factory Installed)	Finish	Accessories (Ordered Separately)
<input type="checkbox"/> BL Bi-Level dimming Available for 450 - 875W units only. <input type="checkbox"/> CSR Hot Quartz Restrike <input type="checkbox"/> LQ Hot/Cold Quartz Restrike <input type="checkbox"/> LQ1 Separately Wired (120V) Quartz Restrike <input type="checkbox"/> F1 Single Fuse (120/277V) <input type="checkbox"/> F2 Double Fuse (208/240/480V) <input type="checkbox"/> SAG SAG lens for vertical lamp orientation <input type="checkbox"/> TLR Twist-Lock Photocell Receptacle <input type="checkbox"/> TLR-PC(***)V Twist-Lock Receptacle with Photocell Specify voltage, 480V not available. <input type="checkbox"/> PCB(***)V Photocell Button Specify voltage, 480V not available. <input type="checkbox"/> HSS-H-AL4 Internal House Side Shield <input type="checkbox"/> DS(XX) Decorative Striping XX = color: 01 = White 02 = Black 03 = Gold metallic 04 = Red 05 = Silver metallic 08 = Blue 69 = Dark Green	<input type="checkbox"/> SA Satin Aluminum <input type="checkbox"/> BK Black <input type="checkbox"/> DB Dark Bronze <input type="checkbox"/> WH White <input type="checkbox"/> GR Gray <input type="checkbox"/> GN Green	<input type="checkbox"/> F1-KIT Single Fuse Kit (120/277V) <input type="checkbox"/> F2-KIT Double Fuse Kit (208/240/480V) <input type="checkbox"/> SK-AL4-(F) External Glare Shield F = Specify finish

Notes

- 1) Allows field selection of 120/208/240/277V. (No 480V) Certain options require voltage selection as well.
- 2) Refer to page 5 for Drill Templates.
- 3) X = Specify pole size: (3.5 / 4)" OD; (4 / 5)" OD.
- 4) May be used in the following configurations only: 1 @ 90°; 2 @ 180°.

- 5) X = Specify configuration: 1 @ 90°; 2 @ 90°; 3 @ 90°; 4 @ 90°; 2 @ 180°; 2 @ 120°; 3 @ 120°.
- 6) Y = Specify tenon size: 2.375" OD x 4" tall; 3 / 3.5" OD x 6" tall; or 3.5 / 4" OD x 6" tall.
- 7) XY = Specify pole size and type: 4S, 5S, 2.375R, 3R, or 4R.

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Distribution Guide & Ballast Data¹

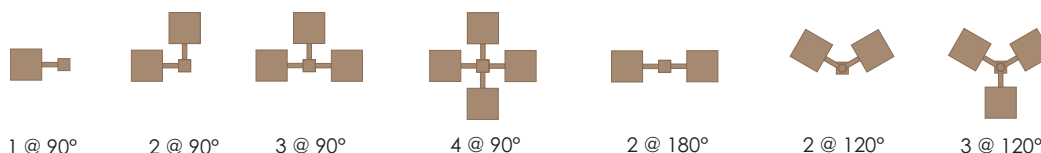
Source Type ²	Catalog Number	Lamp Envelope	Optics (Distribution) (Reflector Type) ⁵	Cutoff Level	.ies File Name ³	Ballast Type ⁴	ANSI Code	Line Current 120 / 208 / 240 / 277 / 480	Line Watts
MH	AL4M-1000	BT37	3F, 4F, 5F	Full Cutoff	al4m-1000-(*).ies	CWA	M47 / H36	9.2 / 5.6 / 4.7 / 4.1 / 2.4	1080
PS	AL4P-400	BT / ED37	3F, 4F, 5F	Full Cutoff	al4p-400-(*).ies	CWA	M135 / M155	4.0 / 2.2 / 1.9 / 1.8 / 1.0	456
PS	AL4P-450	BT / ED37	3F, 4F, 5F	Full Cutoff	al4p-450-(*).ies	CWA	M144	4.4 / 2.6 / 2.2 / 1.9 / 1.1	514
PS	AL4P-750	BT37	3F, 4F, 5F	Full Cutoff	al4p-750-(*).ies	CWA	M149	7.0 / 4.0 / 3.5 / 3.0 / 1.7	820
PS	AL4P-875	BT37	3F, 4F, 5F	Full Cutoff	al4p-850-(*).ies	CWA	M166	7.8 / 4.3 / 3.9 / 3.4 / 2.0	945
PS	AL4P-1000	BT37	3F, 4F, 5F	Full Cutoff	al4p-1000-(*).ies	CWA	M141	9.0 / 5.2 / 4.5 / 3.9 / 2.4	1080
HPS	AL4S-400	E18	3F, 4F, 5F	Full Cutoff	al4s-400-(*).ies	CWA	S51	4.1 / 2.5 / 2.1 / 1.9 / 1.1	467
HPS	AL4S-750	BT37	3F, 4F, 5F	Full Cutoff	al4s-750-(*).ies	CWA	S111	6.8 / 4.0 / 3.5 / 3.1 / 1.8	840
HPS	AL4S-1000	BT37	3F, 4F, 5F	Full Cutoff	al4s-1000-(*).ies	CWA	S52	9.5 / 5.5 / 4.8 / 4.2 / 2.5	1100

Notes:

- 1) The Spectra IV (AL4) Series can accommodate a variety of other wattages and lamps. Please consult factory with specific requirements.
- 2) MH = Metal Halide, PS = Pulse Start Metal Halide, HPS = High Pressure Sodium. Clear lamps are recommended for optimum uniformity.

- 3) Replace (*) with optic designation: 3F, 4F, or 5F (Vertical Lamp / Flat Glass / Full Cutoff)
- 4) CWA = Constant Wattage Autotransformer.

Mounting Configurations



Note: 2 @ 120° and 3 @ 120° mounting configurations require Round Poles or use of Round Pole Tenon Adapter. All other configurations may be used with Round or Square Poles.

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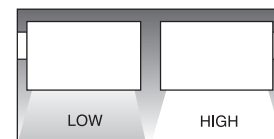
Option details (Factory Installed)

BL Bi-Level

Note: **Available for 450 - 875W units only.**
Suitable for HPS in any position. Consult factory when specifying dimming with Metal Halide.

Bi-Level provides high/low level of lamp output with up to 50% power consumption.

Zero crossover network avoids strobing and lamp dropout.



Auxiliary / Emergency Lighting (150 watt quartz lamp, standard)
Combined quartz wattage may not exceed HID lamp wattage. 120V double contact bayonet base. LQ1 requires an interlock by others to ensure HID and quartz source are not operated together.

CSR Hot Quartz Restrike using Current Sensing Relay (without time delay)



Extinguishes auxiliary quartz lamp when arc of the main HID lamp strikes.

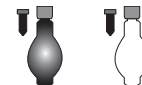
Activation: At (initial) Cold Start or Restrike (after a momentary "Brown Out" or extended "Black Out" power interruption), through Run Down.

CSR Auxiliary Quartz Operation



Normal Start:

Quartz lamp energized until main HID lamp strikes.



HID Lamp Reaches Full Brightness:

Auxiliary quartz lamp automatically extinguished when main HID lamp strikes. (Takes approximately 3 minutes to reach approx. 40% brightness.)

LQ LiteMatic Hot / Cold Quartz Restrike



Provides LiteMatic quartz auxiliary operation for fixtures with 120V or multi-tap ballasts. 120V auxiliary LiteMatic quartz lamp power supplied by ballast (AC line voltage). Quartz lamp remains on for three minutes after main HID lamp strikes and reaches approximately 40% light output.

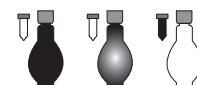
Activation: At (initial) Cold Start or Restrike (after a momentary "Brown Out" or extended "Black Out" power interruption), through Run Down, Restrike and Ramp Up.

LQ Auxiliary LiteMatic Quartz Operation



Normal Start:

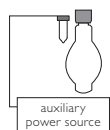
Quartz lamp energized at initial cold start or at restrike after a temporary power interruption.



Quartz Lamp Remains on during Ramp Up:

Besides providing illumination while the main HID lamp reaches full brightness, the warmth provided by the quartz lamp helps to create a favorable restrike condition for the main HID lamp (useful in extreme cold temperatures).

LQ1 Separately Wired (120V) Hot / Cold Quartz Restrike



Externally controlled emergency lighting from a separate power source. Quartz lamp is extinguished once power is restored.

To ensure integrity of the emergency lighting system, LQ1 leads should be hardwired.

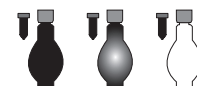
Activation: At "Black Out" conditions only. Normal HID operation will occur at all other times.

LQ1 Emergency Quartz Operation



At AC Power Interruption:

During AC line voltage power interruption, auxiliary quartz lamp is automatically energized by separately wired power source.



Once Power is Restored, Quartz Lamp Automatically Extinguishes:

Used specifically for emergency lighting during "Black Out" periods, or times of extended power interruption. (Takes approximately 3 minutes for HID lamp to reach full brightness.)

Ballast Fusing

Voltage must be specified.

Standard unit consists of 1 or 2 KTK 30 amp fuses mounted internally on the ballast plate.

F1

Single Fuse, 120 / 277V

F2

Double Fuse, 208 / 240 / 480V



Photocontrol

Not available in 480V. Factory installed through side wall of luminaire.

TLR

Twist-Lock Receptacle

TLR-PC120V

Twist-Lock Receptacle with 120V Photocell

TLR-PC208V

Twist-Lock Receptacle with 208V Photocell

TLR-PC240V

Twist-Lock Receptacle with 240V Photocell

TLR-PC277V

Twist-Lock Receptacle with 277V Photocell

PCB120V

120V Photocell Button

PCB208V

208V Photocell Button

PCB240V

240V Photocell Button

PCB277V

277V Photocell Button

Factory Installed Internal House Side Shield option

HSS-H-AL4

Internal House Side Shield.

Note: AL4 Type IV optics (4F) include an internal house side shield.

DS(XX)

Decorative Striping options
Specify color as shown on page 2.

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Accessory details (Field Installed - Shipped Separately)

F1-KIT	Single inline Fuse Kit, 120 / 277V
F2-KIT	Double inline Fuse Kit, 208 / 240 / 480V

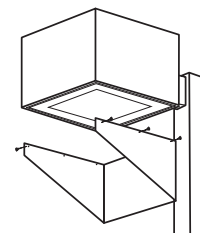
Kit consists of 1 or 2 fuse holders and 1 or 2 inline KTK 30 amp fuses for field installation. (Voltage must be specified.)

SK-AL4-(F) External Glare Shield

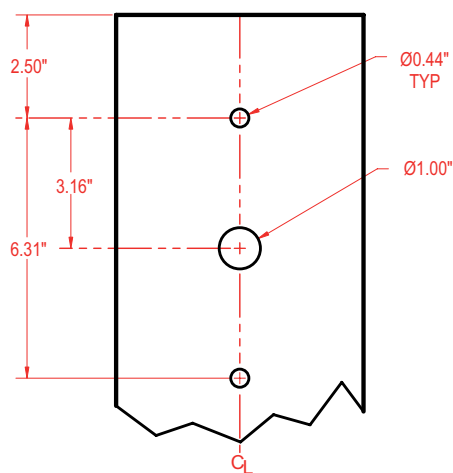
F = Specify finish.

Field installed accessory provides advanced directional control of spill light. Mounts to housing.

Recommended finish is BK (Black).

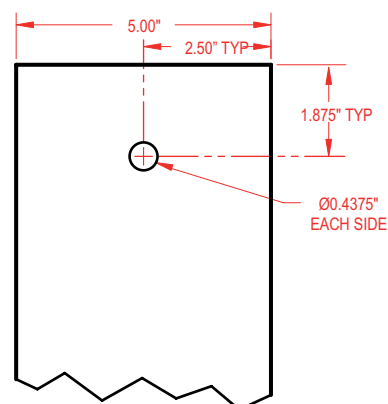


Drill Template No. 11 (NTS)



- SS** Arm Mount to Square Pole
 - SR** Arm Mount to Round Pole
 - SA2** Adjustable Arm Mount to Square Pole
- 4\"-6\" Square Pole or 3.5\"-5\" Round Pole**

Drill Template No. 12 (NTS)



- PT** Post Top Mount to 5\" Square Pole

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Notes

