

# AL3R Series

## Spectra III Round Area Luminaire, 250-400W HID / 165W QL

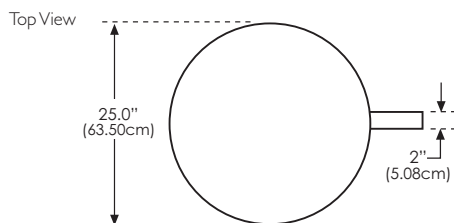
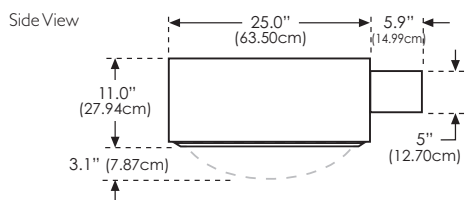
Type:	Job:	Approvals:				
Catalog Number:						Date: Page 1 of 4
Series/Source-Wattage	Optics (Distribution)	Voltage	Mounting	Options (Factory Installed)	Finish	Accessories (Field Installed)

### Overall Dimensions

For Reference Only

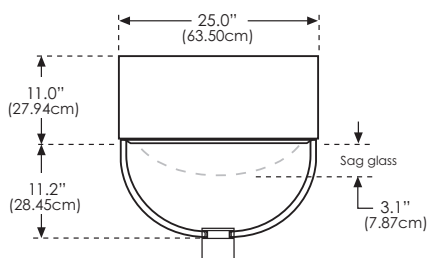
#### AL3R

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



#### AL3R

post top yoke mount (PT(X)R)



EPA Effective Projected Area in Ft²

	Number of Fixtures			
	1	2	3	4
<b>Arm Mount (SS/SR)</b>				
Flat glass	1.4	2.7	3.2	3.7
Sag glass	1.5	3.0	3.7	4.1
<b>Post Top Mount (PT(X)R)</b>				
Flat glass	1.3	N/A	N/A	N/A
Sag glass	1.5	N/A	N/A	N/A

See Mounting Configuration chart on page 3.

Weight 60 lbs. (27.22 kgs)

### Specifications

#### Housing

Seamless spun aluminum housing. Standard unit constructed to IP54.

#### Optical Module

Rotatable multi-faceted segmented reflectors shall be made of high purity enhanced Super Sheet (94% reflectance) aluminum. Optical assemblies shall be field rotatable at 90° increments and exchangeable. Lamp orientation and lens flexibility allow the AL3R Series (Spectra III Round Area Luminaires) to provide optics meeting the IES definitions of Full Cutoff and Cutoff. "F" optics combine standard flat glass lens with vertical lamp orientation to achieve Full Cutoff and is Dark Sky Ordinance compliant. Type "V" and Type "H" also available.

#### Lamp Access

Door frame shall be die-cast aluminum and is gasketed to ensure a positive seal to the housing.

#### Lens

Lens shall be tempered glass to withstand thermal and physical shock. (Flat glass or sag glass determined by wattage and optics specified.)

#### Socket

A porcelain, 4KV pulse-rated, grip-type mogul base socket shall be used to prevent lamp loosening and to maintain proper lamp positioning for HID sources.

#### Ballast

HID Units: 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. Ballast has Class H, 180°C (356°F) rated insulation system.

QL Units: High frequency ballast has reliable starting at temperatures as low as -40°C (-40°F), with total harmonic distortion of less than 10%. Lamp/Generator combination has 100,000 hour rated lamp life.

#### Mounting

Standard surface arm mount (field installed) shall be of heavy gauge extruded aluminum. Threaded tension rods shall be used to bolt to square or round poles. Optional post top mount shall allow fixture to be mounted to round poles or tenons. Additional mounting options include a mastfitter arm mount for a horizontal tenon, a wall mount bracket with 6" arm, and pole top tenon adapters with arm mount for square and round poles.

#### Finish

Standard finish shall be Textured Dark Bronze UltraClad polyester powder coating, 2.5 mil nominal thickness, electrostatically applied and oven cured to ensure extreme durability. Other colors may be specified.

#### 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

Philips Gardco luminaires feature a 5 year limited warranty. See Warranty Information for complete details and exclusions. Polycarbonate lenses carry a 1 year warranty only.

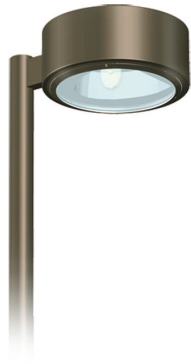


Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled 'Contain Mercury' and/or with the symbol 'Hg'. Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycle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

# AL3R Series

## Spectra III Round Area Luminaire, 250-400W HID / 165W QL

Type:	Job:	Page 2 of 4
-------	------	-------------



### Series/Source-Wattage

#### Pulse Start Metal Halide

- ☐ **AL3RP-250**
- ☐ **AL3RP-320**
- ☐ **AL3RP-350**
- ☐ **AL3RP-400**



#### High Pressure Sodium

- ☐ **AL3RS-250**
- ☐ **AL3RS-400**

#### QL Induction<sup>1</sup>

- ☐ **AL3RQL-165**

### Optics (Distribution)<sup>1</sup>

#### Vertical lamp

Full Cutoff, Flat Glass<sup>2</sup>

- ☐ **2F** Type II
- ☐ **3F** Type III
- ☐ **4F** Type IV
- ☐ **5F** Type V

#### Vertical lamp

Cutoff, Sag Glass<sup>5</sup>

- ☐ **2V** Type II
- ☐ **3V** Type III
- ☐ **4V** Type IV
- ☐ **5V** Type V

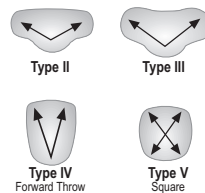
#### Horizontal lamp

Full Cutoff, Flat Glass

- ☐ **2H** Type II
- ☐ **3H** Type III
- ☐ **4H** Type IV
- ☐ **5H** Type V

#### Distribution Patterns

Basic Roadway Distribution Patterns as follows:



### Voltage

available  
HID  
voltages

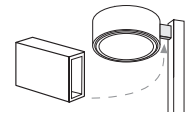
- ☐ **120**
- ☐ **208**
- ☐ **240**
- ☐ **277**
- ☐ **347**
- ☐ **480**
- ☐ **QV<sup>3</sup>**

available  
QL  
voltages<sup>4</sup>

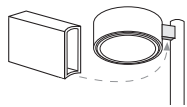
- ☐ **120**
- ☐ **208-277**

### Mounting<sup>5</sup>

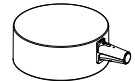
- ☐ **SS** Surface arm mount to square pole (standard)



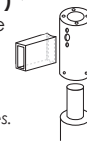
- ☐ **SR(X)<sup>6</sup>** Surface arm mount to round pole  
Mounting edge of arm is contoured to match pole radius.



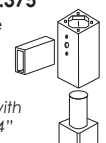
- ☐ **SM** Mastfitter arm mount to 2-3/8" O.D. x 5" horizontal tenon



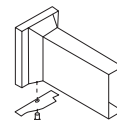
- ☐ **RTA-(X)-(Y)<sup>7,8</sup>** Round pole tenon adapter  
See footnotes.  
6" arm included.



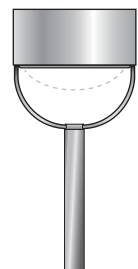
- ☐ **SPTA-(X)-2.375<sup>7</sup>** Square pole tenon adapter  
Slipfitter for Square Pole with 2.375" O.D. x 4" vertical tenon, 6" arm included.



- ☐ **WBA** Wall mount bracket with 6" arm



- ☐ **PT(X)R** Post top yoke mount



### Options

- ☐ **BL** Bi-Level dimming (for HID vertically lamped units only)
- ☐ **LQ** Hot/Cold Quartz Restrike (for HID units only)
- ☐ **LQ1** Separately Wired (120V) Quartz Restrike (for HID units only)
- ☐ **F1** Single Fuse (120/277V/347)
- ☐ **F2** Double Fuse (208/240/480V)
- ☐ **F3** Double Fuse (208/240/480V) Canadian double pull
- ☐ **TLR** Twist-Lock Photocell Receptacle
- ☐ **TLR-PC(\*\*\*)V** Twist-Lock Receptacle with Photocell  
Specify voltage, 480V not available.
- ☐ **PCB(\*\*\*)V** Photocell Button  
Specify voltage, 480V not available.
- ☐ **SLS** Stabilux Socket (for H optics only)
- ☐ **HSS** Internal House Side Shield

### Finish

- ☐ **TSA** Textured Satin Aluminum
- ☐ **BRP** Bronze Paint
- ☐ **BLP** Black Paint
- ☐ **WP** White Paint
- ☐ **NP** Natural Paint
- ☐ **VP** Verde Paint
- ☐ **OC** (\*) Optional Color Specify RAL Designation
- ☐ **SC** Special Color Paint (specify, must supply color chip)

### Accessories (Ordered Separately)

- ☐ **F1-KIT** Single Fuse Kit (120/277/347V)
- ☐ **F2-KIT** Double Fuse Kit (208/240/480V)
- ☐ **F3-KIT** Double Fuse Kit (208/240/480V) Canadian double pull

#### Notes

- 1) QL units available in 3F, 5F, 3V, and 5V distribution only.
- 2) Not available for HPS.
- 3) Allows field selection of 120/208/240/277V. (No 480V). Options may require voltage selection. HID units only.

- 4) Consult factory for availability of additional voltages for QL induction units, with internal transformer.
- 5) Refer to Drill Template 8 on page 4 for details.
- 6) X = Specify pole size: (3.5 / 4)" O.D., or (4 / 5)" O.D.

- 7) X = Specify configuration: 1 @ 90°; 2 @ 90°; 3 @ 90°; 4 @ 90°; 2 @ 180°. Or 2 @ 120° or 3 @ 120° (round poles only).
- 8) Y = Specify tenon size: 2.375" O.D. x 4" tall; 3 / 3.5" O.D. x 6" tall, or 3.5 / 4" O.D. x 6" tall.

# AL3R Series

## Spectra III Round Area Luminaire, 250-400W HID / 165W QL

Type:	Job:	Page 3 of 4
-------	------	-------------

### Distribution Guide & HID Ballast Data<sup>1</sup>

Source Type <sup>2</sup>	Catalog Number	Lamp Envelope	Optics (Distribution) (Reflector Type) <sup>5</sup>	Cutoff Level	.ies File Name <sup>3</sup>	Ballast Type <sup>4</sup>	ANSI Code	Line Current 120 / 208 / 240 / 277 / 480	Line Watts
PS	<b>AL3RP-250</b>	BT / ED28	2F, 3F, 4F, 5F, 2H, 3H, 4H, 5H 2V, 3V, 4V, 5V	Full Cutoff Cutoff	alp25(*).ies	CWA	M138	2.5 / 1.5 / 1.3 / 1.1 / 0.6	288
PS	<b>AL3RP-320</b>	BT / ED28	2F, 3F, 4F, 5F, 2H, 3H, 4H, 5H 2V, 3V, 4V, 5V	Full Cutoff Cutoff	alp32(*).ies	CWA	M132 / M154	3.3 / 1.9 / 1.7 / 1.4 / 0.8	368
PS	<b>AL3RP-350</b>	BT / ED28	2F, 3F, 4F, 5F, 2H, 3H, 4H, 5H 2V, 3V, 4V, 5V	Full Cutoff Cutoff	alp35(*).ies	CWA	M131	3.7 / 2.1 / 1.8 / 1.6 / 0.9	400
PS	<b>AL3RP-400</b>	BT / ED28	2F, 3F, 4F, 5F, 2H, 3H, 4H, 5H 2V, 3V, 4V, 5V	Full Cutoff Cutoff	alp40(*).ies	CWA	M135 / M155	4.0 / 2.2 / 1.9 / 1.8 / 1.0	456
HPS	<b>AL3RS-250</b>	E18	2H, 3H, 4H, 5H 2V, 3V, 4V, 5V	Full Cutoff Cutoff	als25(*).ies	CWA	S50	2.7 / 1.6 / 1.3 / 1.2 / 0.7	310
HPS	<b>AL3RS-400</b>	E18	2H, 3H, 4H, 5H 2V, 3V, 4V, 5V	Full Cutoff Cutoff	als40(*).ies	CWA	S51	4.1 / 2.5 / 2.1 / 1.9 / 1.1	467

### Distribution Guide & QL Induction Lighting System Data

Source Type	Catalog Number	System Lamp	Optics (Distribution) (Reflector Type)	Cutoff Level	.ies File Name <sup>4</sup>	System Generator/Power Coupler	Line Current 120 / 208 / 240 / 277	Line Watts
QL	<b>AL3QL-165</b>	165W QL Induction 80 CRI, 12,000 initial lumens	3F, 5F, 3V, 5V	Full Cutoff Cutoff	alq16(*).ies	165W QL 100,000 hour rated system life	1.4 / 0.8 / 0.7 / 0.6	165

Distribution Guide notes:

- 1) The AL3R Series can accommodate a variety of other wattages and lamps. Consult factory.
- 2) PS = Pulse Start, HPS = High Pressure Sodium. Clear HID lamps are recommended for optimum uniformity. QL source available with coated lamp only.

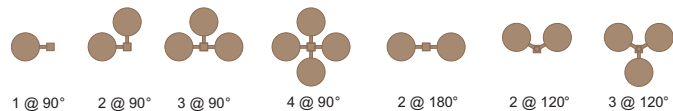
- 3) Replace (\*) with optic available for HID units:  
2F, 3F, 4F, 5F (Vertical Lamp / Flat Glass / Full Cutoff)  
2H, 3H, 4H, 5H (Horizontal Lamp / Flat Glass / Full Cutoff)  
2V, 3V, 4V, 5V (Vertical Lamp / Sag Glass / Cutoff)
- 4) CWA = Constant Wattage Autotransformer.

- 5) Horizontally lamped AL3R reflectors are equipped with POMB sockets. Accommodates standard or high output lamps.
- 6) Replace (\*) with the following optic available for QL units:  
3F, 5F (Vertical Lamp / Flat Glass / Full Cutoff)  
3V, 5V (Vertical Lamp / Sag Glass / Cutoff)

### Mounting Configurations

Note: 2 @ 120° and 3 @ 120° mounting configurations require Round Poles or use of Round Pole Tenon Adapter.

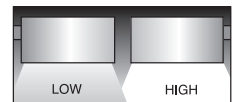
All other configurations may be used with Round or Square Poles.



### Option details (Factory Installed)

**BL** Bi-Level  
Available for HID vertically lamped units only.

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.

#### LQ LiteMatic Hot / Cold Quartz Restrike



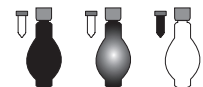
Provides LiteMatic quartz auxiliary operation for fixtures with 120V or multi-tap ballasts. 120V auxiliary LiteMatic quartz lamp power supplied by ballast (AC line voltage). Quartz lamp remains on for three minutes after main HID lamp strikes and reaches approximately 40% light output.

**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

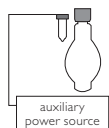


**Normal Start:**  
Quartz lamp energized at initial cold start or at restrike after a temporary power interruption.



**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.

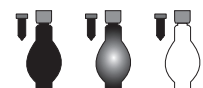
To ensure integrity of the emergency lighting system, LQ1 leads should be hardwired.

**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.)

# AL3R Series

## Spectra III Round Area Luminaire, 250-400W HID / 165W QL

Type:	Job:	Page 4 of 4
-------	------	-------------

### Ballast Fusing *Voltage must be specified.*

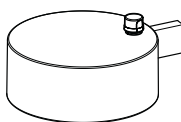
<b>F1</b>	Single Fuse, 120 / 277 / 347V
<b>F2</b>	Double Fuse, 208 / 240 / 480V
<b>F3</b>	Double Fuse, 208 / 240 / 480V (Canadian double pull)

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

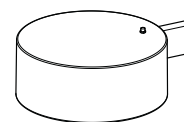


### Photocontrol *Factory installed through top wall of luminaire. Photocells are not available in 480V.*

<b>TLR</b>	Twist-Lock Receptacle
<b>TLR-PC120V</b>	Twist-Lock Receptacle with 120V Photocell
<b>TLR-PC208V</b>	Twist-Lock Receptacle with 208V Photocell
<b>TLR-PC240V</b>	Twist-Lock Receptacle with 240V Photocell
<b>TLR-PC277V</b>	Twist-Lock Receptacle with 277V Photocell



<b>PCB120V</b>	120V Photocell Button
<b>PCB208V</b>	208V Photocell Button
<b>PCB240V</b>	240V Photocell Button
<b>PCB277V</b>	277V Photocell Button



<b>SLS</b>	<i>Stabilux Socket option</i> <b>Available for horizontally lamped optics only: 2H, 3H, 4H, 5H.</b> <i>Adjustable lamp support, insulated with woven ceramic fabric, helps reduce lamp breakage due to mechanical shock and vibration.</i>
------------	--

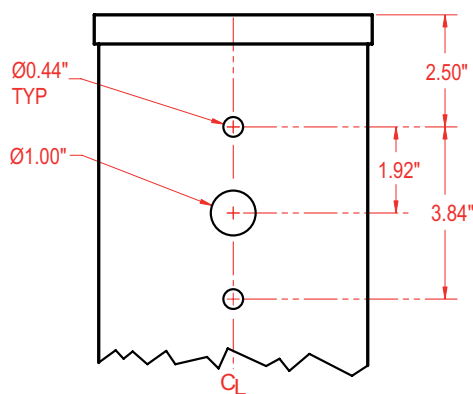
<b>HSS</b>	<i>Factory installed Internal House Side Shield option</i> <i>Available for all optics (flat or sag glass, horizontal or vertical lamp). Useful for perimeter areas.</i>
------------	---

### Accessory details (Field Installed - Shipped Separately)

<b>F1-KIT</b>	Single Inline Fuse Kit, 120 / 277 / 347V
<b>F2-KIT</b>	Double Inline Fuse Kit, 208 / 240 / 480V
<b>F3-KIT</b>	Double Inline Fuse Kit, 208 / 240 / 480V (Canadian double pull) Kit consists of 1 or 2 fuse holders and 1 or 2 KTK 30 amp fuses for field installation. (Voltage must be specified.)

### Notes

#### Drill Template No. 8 (NTS)



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



ISO 9001  
Certified



© 2013 Koninklijke Philips N.V. (Royal Philips). All rights reserved.  
 Specifications are subject to change without notice.  
[www.philips.com/luminaires](http://www.philips.com/luminaires)

G200-144 06/13

Philips Lighting Company  
 200 Franklin Square Drive  
 Somerset, NJ 08873  
 Phone: 855-486-2216

Philips Lighting Company  
 281 Hillmount Road  
 Markham ON, Canada L6C 2S3  
 Phone: 800-668-9008