

# **OUTDOOR LIGHTING ILLUMINATION STUDY**

In general, existing water treatment plant property site lighting will be removed and replaced with new due to the extent of modifications occurring at the site. There is no existing street lighting at this time.

Overall Site Lighting Plan:

See Figure 5.05 to Figure 5.12 for overall site lighting plan and calculated foot-candle levels. Note that small enhancements may be required during final design.

The site lighting was modeled as follows:

- pole lights for roadway / at grade areas
  - o 14' metal halide (100W lamp) on secure side of plant fence
  - o 14' high pressure sodium (100W lamp) on public side of plant fence
  - o modeled with The Archetype\*
- pole lights for main entrance parking
  - o 20' high pressure sodium (150W lamp) on public side of plant fence
  - o modeled with The Archetype\*
- pole lights on above ground filters/ballasted floc/wash water tanks
  - o 10' compact fluorescent lights (2-32W lamps)
  - o modeled with Litonia type Aeris AS1\*
- wall mounted building lights by doors
  - o compact fluorescent lights (2-26W lamps) at 8' on secure side of plant fence
  - o building mounted lighting on public side of plant fence will be coordinated during final design
  - o modeled with Litonia type MRW\*
- \*Make and model is subject to change.

# **Applicable Codes**

Wattages for exterior lighting will be selected in order to comply with Oregon Energy Efficiency Specialty Code. However, in areas with security/safety/crime concerns dictated by the City of West Linn Community Development Code lighting levels may differ. We assume this to be an "approved" exception per Section 505.6 of the Oregon Energy Efficiency Specialty Code.

Due to the sensitive nature and security required for a water treatment plant, lighting control will in general follow the below the outline. However, in areas of security/safety/crime concern lighting will either be left on (based fully on photocell and/or timer operation) or equipped with an operator override to turn it on/off.

# **Street Lighting Illumination**

There is no existing street lighting along the water treatment plant property frontages on Mapleton Drive or Kethorpe Way. The neighboring public have expressed that they would like to keep it that way. The majority of the remainder of Mapleton Drive and Kethorpe Way are also unlit. Forgoing the addition of street lighting may also benefit in seeing less unwanted attention directed towards the water treatment plant during night hours.



### Exterior on New Buildings – Accessible to the Public

Areas readily accessible to the public must meet the City of West Linn Community Development Code. We will be using fully shielded lighting switched by photocell and/or timer. We will utilize high pressure sodium fixtures. Exterior building lighting will be limited to above or beside doors only unless the Owner directs otherwise. Where exterior doors are considered emergency egress paths additional emergency lighting with battery backup will be provided. This specific peiece of exterior lighting will be developed further during final design stages.

### Exterior on New Buildings – Not Accessible to the Public (secure side of plant fence)

We will be using fully shielded lighting switched by motion detector above the exterior doors to save on energy usage while lighting is not actively needed. Since motion detectors will be utilized (as opposed to photocells) we need to use instant on lighting. This leaves us to use fluorescent lights or LED's with cold weather rated ballasts. Exterior building lighting will be limited to above or beside doors only unless the Owner directs otherwise. Where exterior doors are considered emergency egress paths the lighting will need to have battery backup.

# **Outdoor Site Lighting – Accessible to the Public**

Specific areas readily accessible to the public must meet the City of West Linn Community Development Code. We will be using fully shielded lighting switched by photocell and/or timer. We will utilize high pressure sodium fixtures. Exterior site lighting will be provided for; driveway and parking areas readily accessible to the public from Kenthorpe Way, at the storm water area off Kenthorpe Way at the northwest protion of the site, and along the pedestrian path connecting Mapleton to Kenthorpe Way.

Parking and driveway areas will designed for 0.5-1.0 foot-candles average measured at 2.5' above the ground.

### Outdoor Site Lighting – Not Accessible to the Public (secure side of plant fence)

Roadway lighting is required for navigating the site at night time. Compact fluorescent lights are not good candidates for this type of lighting. Outdoor site lighting will be metal halide HID type. It will be fully shielded style to minimize light pollution and glare. This lighting will likely be placed on a timer that will be set to turn off when the plant is vacated in the evening except where lighting would be required for security purposes or where the electric utility may require (to be determined).

Roadway areas will be designed for 0.5-1.0 foot-candles average measured at 2.5' above the ground.

# **Outdoor Process Area – Not Accessible to the Public (secure side of plant fence)**

Much of this lighting will be on elevated tanks that might be visible to neighbors. We will have fully shielded fluorescent fixtures for "instant-on" light switched by building mounted light switches. Lighting is designed for low-level general area lighting when needed and should not be considered task lighting for maintenance. We will decide for pole mounted vs. stanchion mounted during the final design phase. These are switched only. If part of the outdoor process area is determined to be part of the path of egress we will add the required emergency lighting.

Outdoor above ground areas (filters, ballasted floc...) will be designed for 1.0 foot-candles average measured at 2.5' above the walking deck.



We will add some additional switched "instant-on" task lighting (probably floodlights) at certain opentank outdoor process areas for service requirements. This is not modeled as it is for emergency maintenance/service requirements only.



# **VSB1** Square Bollard

Single Function, Vandal-Resistant, Aluminum Shaft

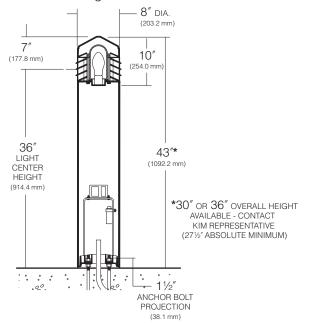
revision 11/13/09 • vsb1.pdf

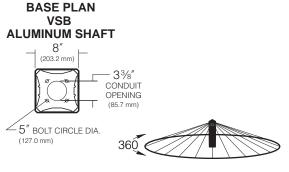
Type: Job: Catalo	og number:		
/SB1	1	1	1
Fixture	Electrical Module	Top Cap and Shaft Finish  See page 2	Option

# **Specifications**

VSB Models 70 to 100 watt Medium Base Lamps 42 watt Compact Fluorescent

**VSB1 -** Single Function Luminaire (Aluminum Shaft) Maximum weight: 35 lb







U.S. Patent D410.553

**Top Cap:** One-piece, die-cast low copper (<0.6% Cu) aluminum %6% minimum thickness, secured to louvers by concealed stainless steel allen screws in keyhole slots. For relamping access, allen screws shall not require complete removal.

**Louvers:** One-piece, die-cast low copper (<0.6% Cu) aluminum with vertical support ribs at  $90^{\circ}$  intervals. Horizontal louver blades shall have a 134'' depth, and be angled  $25^{\circ}$  from the horizontal. Louver shall provide light source cutoff above horizontal. Louver castings shall be secured to shaft by four internal tie rods.

**Lamp Enclosure:** One-piece tempered molded glass with internal flutes and full silicone gasketing at bottom edge.

**Socket:** Porcelain medium base socket rated 4KV for HID Plastic socket for Fluorescent.

**Fixture Head:** Allows flow-through ventilation around and above the lamp enclosure.

**Shaft:** One-piece extruded aluminum, .156" minimum wall thickness with a heavy cast aluminum anchor base concealed within the shaft. Hex socket stainless steel screws shall lock shaft onto the cast anchor base.

**Ballast:** Factory mounted to rigid harness attached to the anchor base. Wiring shall be supplied from the socket for field connection to the prewired ballast components. **HID**: High power factor with starting temperatures of -20°F. for PMH and -40°F. for HPS lamp modes. **26W, 32W, 42W Fluorescent:** High power factor with starting temperature of 0°F.

**Anchor Bolts:** Four  $\frac{3}{6}$ " x 10" + 2" zinc plated L-hooks, each with two nuts, washers and a rigid pressed board template.

**Finish:** Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a titanated zirconium conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Stealth Gray, Platinum Silver, or White. Custom colors are available.

**CAUTION:** Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

Listings and Ratings								
UL cUL 15981	CE	25C Ambient						
IP46 Rated	FS = Fully Shielded <sup>2</sup>							

<sup>&</sup>lt;sup>1</sup>Suitable for wet locations. <sup>2</sup>Dark Sky Legislation Compliant

KIM LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE

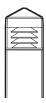


**VSB1** Square Bollard Single Function, Vandal-Resistant, Aluminum Shaft

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Type:

Job: Page: 2 of 3



# **Standard Features**

First	Cat No. VS	<b>P1</b> Cinalo Eunatio	on Aluminum Shaft	Cabled Top	
Fixture	Cat. No. V3	<b>bi</b> Single Function	on, Aluminum Shaft,	, Gabled Top	
Electrical Module	Cat. Nos. for	Electrical Modul	es available:		
PMH = Pulse Start Metal Halide  HPS = High Pressure Sodium  PL = Compact Fluorescent		<ul><li>☐ 70PMH120</li><li>☐ 70PMH208</li><li>☐ 70PMH240</li><li>☐ 70PMH277</li><li>☐ 70PMH347</li></ul>	☐ 100PMH120 ☐ 100PMH208 ☐ 100PMH240 ☐ 100PMH277 ☐ 100PMH347	☐ 70HPS120 ☐ 70HPS208 ☐ 70HPS240 ☐ 70HPS277 ☐ 70HPS347	☐ 100HPS120 ☐ 100HPS208 ☐ 100HPS240 ☐ 100HPS277 ☐ 100HPS347
Lamp Lamp Line Watts Type Volts	Lamp	E-17, Coated	E-17, Coated	ED-17, Coated	ED-17, Coated
70 PMH 120	Socket ANSI Ballast Type	Medium Base M-98	Medium Base M-90	Medium Base S-62	Medium Base S-54
		☐ 42PL¹			
	Lamp Socket	Compact Fluor. GX24q-4	_		
<b>NOTE:</b> For lamp/ballast information outside of the U.S.A. and Canada, please consult your local Kim representative.	•	es one 26, 32, or ed lamps are reco	42 watt lamp at 120 mmended.	) thru 277 volts (50	0-60 Hz).
Finish Super TGIC powder coat paint over a titanated zirconium conversion coating on fixture and shaft.	Gray or Whi	BL □ DB k and Dark Bronz te.  brs subject to add	□ <b>LG</b> □ <b>SG</b> ze colors will produ	□ <b>PS</b> uce slightly less local national partities.	□ WH □ CC uver brightness than Light and extended lead times.
Optional Houseside Shield Cat. No.   No Option	180° trimmable houseside shield that inserts inside lamp enclosure032″ thick natural aluminum, trimmable in field.				
Emergency Battery Back-up Cat. No.	Internal batt 23% of initia lamps	ery pack provides I lamp lumens for	s 90 minutes of sup 26, 32, or 42 watt c	oplemental light a ompact fluorescen	battery back-up



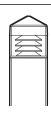
# **VSB1** Square Bollard

Single Function, Vandal-Resistant, Aluminum Shaft

revision 11/13/09 • vsb1.pdf

Type:

Job: Page: 3 of 3



# **Standard Features**

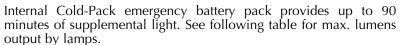
# Cold-Pack Emergency Battery Pack

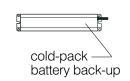
Cat. No. 

EM-CP

□ No Option

The EM-CP option is a temperature controlled ballast designed to maintain operation without interruption within a range of hi/low ambient temperatures, -20°C to +55°C.





Lamp (4-Pin)	1 lamp lumens
42W	750
32W	575
26W	450

#### Intended Use

For building- and wallmounted applications.

#### Construction

Rugged, die-cast, singlepiece aluminum housing. Die-cast doorframe has a 1/8" thick tempered glass lens. Doorframe is fully gasketed with one-piece solid silicone.

Standard finish is textured dark bronze (DDBT) corrosion-resistant polyester powder finish. Additional architectural colors are available; see www.lithonia.com/archcolors. Striping is also available.

#### **Optics**

Segmented reflectors provide superior uniformity and control. Reflectors are interchangeable. Three full cutoff distributions available: FT (forward throw), MD (medium throw) and WT (wide throw).

### Electrical

Ballast: All ballasts are 100% factory tested. High reactance, high power factor for 150W and below. Constant wattage autotransformer 175W. MH: 150W and below are standard with pulse-start ignitor technology. CSA, NOM or INTL required for probe

start shipments outside the U.S. for 175M. Not available with 175M SCWA. Compact fluorescent uses an electronic high-frequency ballast.

Socket: Porcelain, mediumbase socket for MRW with copper alloy, nickel-plated screw shell and center contact. Fluorescent is four-pin positive latching thermoplastic. UL Listed. Compact fluorescent uses an electronic high-frequency ballast. LPI is standard 35K for CFL.

#### Installation

Universal mounting mechanism with integral mounting support allows fixture to

hinge down. Bubble level provides correct alignment with every installation.

#### Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified (see Options). UL listed suitable for wet locations (damp location listed in lens up orientation). WLU option offers wet location listing in up orientation (see Options). IP65 rated. 25°C ambient. U.S. patent No. D565.232.







ORDERING INFORMATION

For shortest lead times, configure products using **bolded options**.

Example: MRW 100M FT TB LPI

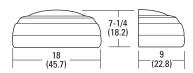
Series	Lamp type				Dist	ribution	Voltage	Ballast		Mountin	g	Options	<b>&gt;&gt;&gt;</b>
MRW	High pressure sodium¹ 35S² 50S 70S 100S 150S	Metal halide 50M <sup>1,3</sup> 70M <sup>1,3</sup> 100M <sup>1</sup> 150M 175M <sup>4</sup>	Metal halide ceramic <sup>5</sup> 50MHC <sup>1,3</sup> 70MHC <sup>1,3</sup> 100MHC <sup>1</sup> 150MHC	Compact fluorescent <sup>1</sup> 26DTT 2/26DTT 26TRT 2/26TRT 32TRT 2/32TRT 42TRT 2/42TRT	FT MD WT	Forward Throw Medium throw Wide throw	120 208 <sup>6</sup> 240 <sup>6</sup> 277 347 480 <sup>6</sup> TB <sup>7</sup> MVOLT <sup>8</sup> 23050HZ <sup>9</sup>	CWI SCWA	Magnetic ballast Constant wattage isolated <sup>9</sup> Super CWA ballast <sup>10</sup>		Alled Mounting plate (std.) arately <sup>11,12</sup> Surface- mounted back box <sup>13</sup> Uptilt 5 degrees bracket <sup>14</sup>	Ships insta SF DF <b>ELDW</b> ELDWR ELDWRPS EC QRS	Single fuse, 120V, 277V, 347V  Double fuse, 208V, 240V, 480V  Bodine emergency battery pack <sup>15, 16, 17</sup> Fixture wired ready for Bodine B30 battery pack <sup>15, 16, 18</sup> Fixture wired ready for PS1400 or PSDL battery pack <sup>15, 16, 18, 19</sup> Emergency circuit <sup>16, 20</sup> Quartz restrike system <sup>16, 20</sup>

▶ Option	s (continued)			Finish		Lamp	ed
ELED	LED emergency single <sup>16, 21, 22</sup>	IBS	Internal backlight shield <sup>25</sup>	(blank)	Dark bronze, textured (std.)	LPI	Lamp
2ELED	LED emergency double <sup>16, 21, 22</sup>	WLU	Wet location door for up orientation	DSST	Sandstone-textured		included <sup>27</sup>
DC12	Emergency circuit 12V; 35W lamp included <sup>16, 23</sup>	CSA	Meets Canadian standards	DNAT	Natural aluminum-textured	L/LP	Less lamp
2DC12	Emergency circuit 12V; two 35W lamps included <sup>16,23</sup>	NOM	Meets Mexican standards (consult factory)	DWHG	White-textured		
DC2012	Emergency circuit 12V; 20W lamp included <sup>16, 23</sup>	INTL	International shipment for 175M.	DBLB	Black-textured		
2DC2012	Emergency circuit 12V; two 20W lamps included <sup>16,23</sup>	<u>Ships</u>	separately <sup>11, 26</sup>	DDB	Dark bronze		
PE	Photoelectric cell - button type <sup>24</sup>	VG	Vandal guard	CR	Enhanced corrosion resistance		
DFL	Diffusing lens	WG	Wire guard	CRT	Non-stick protective coating (black)		

# ADDITIONAL INFORMATION

For additional product information, visit www.lithonia.com.

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



Weight: 35 lbs (15.9 kg)

### Notes

- 1 Not available with SCWA.
- 2 120V, NPF only.
- 3 Not available with 480V.
- 4 Not available with SCWA. Requires CSA, NOM, or INTL.
- 5 Not applicable with L/LP.
- 6 Must specify CWI for use in Canada.
- 7 Optional multi-tap ballast (120, 208, 240, 277V); (120, 277, 347V in Canada; ships as 120V/347V).
- 8 Optional multi-volt electronic ballast (compact fluorescent only) capable of operating any line voltage from 120V-277V.
- 9 Consult factory for available wattages.
- 10 Only available with 150M or 150MHC.
- 11 May be ordered as an accessory.
- 12 Must specify finish.
- 13 Order WSBBW when needed as an accessory.
- 14 Order WSUT5 when needed as an accessory.

- 15 Available for compact fluorescent units only. Must specify voltage.
- 16 Only one emergency option available per fixture.
- 17 Not available with 2/32TRT or 2/42TRT.
- 18 Battery pack (not included) to be mounted external to luminaire. Pilot light/test switch mounting plate included. 32°F min. operating temperature.
- 19 Not available with 2/42TRT.
- 20 Maximum allowable wattage lamp included.
- 21 Available in 120V or 277V only.
- 22 Maximum wattage 100M or 70S.
- 23 Not available with fusing.
- 24 Must be ordered with fixture; cannot be field installed. Not available 347V, 480V, or TB.
- 25 Not available with medium throw.
- 26 Prefix with fixture name and size (e.g., MRWVG)
- 27 For medium throw distribution, lamp is coated.



520

PRODUCT INFORMATION Architectural



#### Intended Use

For streets, walkways, parking lots and surrounding areas.

#### Construction

Housing: Rugged, die-cast, single-piece aluminum housing with nominal 1/8" wall thickness.

Door Assembly: Die-cast doorframe, impact-resistant, tempered glass lens, 3/16" thick, fully sealed with onepiece tubular silicone gasket.

Finish: Standard finish is dark bronze polyester powder finish. Additional architectural colors available; see www.lithonia.com/archcolors.

#### **Optics**

Anodized segmented reflectors for superior uniformity and control. Reflectors attach

with tool-less fasteners and are rotatable and interchangeable. Four full cutoff distributions available: Type II (roadway), Type III (asymmetric), Type IV (forward throw), and Type V (symmetric square).

#### Electrical

Ballasts: Mounted on removable power tray and have positive locking disconnect plugs. All ballasts are 100% factory tested. High reactance, high power factor for 150W and below. Constant wattage autotransformer 175W and above. MH: 150W and below are standard with pulse-start ignitor technology. Super CWA Pulse Start ballasts, 88% efficient and EISA legislation compliant, are required for 151-400W

(must order SCWA option) for U.S. shipments only. CSA, NOM or INTL required for probe start shipments outside the U.S. Compact fluorescent uses an electronic highfrequency ballast.

Socket: Porcelain, mediumbase socket for AS1, mogulbase socket for AS2, with copper alloy nickel-plated screw shell and center contact. Ceramic metal halide lamps are recommended for use in applications where superior color rendition, lumen maintenance and longer lamp life are desired. Fluorescent is four-pin positive latching thermoplastic. LPI is standard 35K for CFL.

#### Installation

Heavy-duty easy-mount block attaches to pole or wall to provide ease of installation as well as ensured alignment and leveling. Additional backing plate and receiver used to mount AST suspend tension rod. AST1 mounts 9.64" lower than specified pole height. AST2 mounts 13.89" lower than specified pole height.

#### Listings

UL Listed (standard). CSA Certified or NOM Certified (see Options). UL Listed for 25 °C ambient and wet locations. U.S. Patent No. D447, 590. Canadian Patent No. 94324. IP65 Rated.







Example: AS1 150M SR2 TB SPA LPI For shortest lead times, configure products using **bolded options** 

Series	Lamp type <sup>1</sup>				Distrib	ution <sup>1</sup>	Voltage	Ballast		Mountin	1q <sup>14</sup>		<b>&gt;&gt;&gt;</b>
AS1 AS2 AST1 AST2	High pressure sodium <sup>2</sup> 35S <sup>3</sup> 50S <sup>4</sup> 70S 100S 150S 200S 250S	400S Metal halide 50M <sup>2,5</sup> 70M <sup>2,5</sup> 100M <sup>2</sup> 150M 175M <sup>6</sup> 200M <sup>7</sup>	250M 320M <sup>7</sup> 400M Metal halide ceramic <sup>8</sup> 50MHC <sup>2,5</sup> 70MHC <sup>2,5</sup> 100MHC <sup>2</sup>	Compact fluorescent 2/32TRT <sup>9</sup> 42 TRT 2/42TRT <sup>9</sup> 57TRT 70TRT	SR2 SR3	Type II segmented Type III segmented Type IV segmented, FT, sharp cutoff Type IV segmented, FT, wide Type V segmented, square	120 208 <sup>10</sup> 240 <sup>10</sup> 277 347 480 <sup>10</sup> TB <sup>11</sup> 23050HZ <sup>12</sup> MVOLT <sup>13</sup>		Magnetic ballast Constant wattage isolated <sup>12</sup> Super CWA ballast	Ships inc SPA RPA WBA Ships sep ASKMA1	-	DCAS1R DCAS2	AS1 Deco arm for square pole AS1 Deco arm for round pole AS2 Deco arm for square pole

		Lamped
DF Double fuse, 208V, 240V, 480V <sup>18</sup> GMF Internal slow-blow fusing  ELDW Bodine emergency battery backup <sup>18</sup> INTL Available for MH probe start shipping  PE7 NEMA to suitable hold in the probes in	wist-lock PE (120V-240V)  wist-lock PE (347V)  wist-lock PE (480V)  wist-lock PE (277V)  DMA  Natural aluminum  g cap for PER option  DWH  White	LPI Lamp included L/LP Less lamp

DRILLING PATTERNS (SEE POLE ORDERING, PAGE 588)

DM32AS 3 at 120° (round poles only)

1 at 90°

2 at 180°

2 at 90°

3 at 90°

4 at 90°

ADDITIONAL INFORMATION For additional product information, visit www.lithonia.com.

	CONFIGURATIONS	
SERIES	LAMP TYPE	DISTRIBUTION
AS1, AST1	35S, 50S, 50M, 50MHC, 70S, 70M, 70MHC, 100S, 100M, 100MHC, 150S, 150M, 150MHC, 175M, 42TRT, 57TRT, 70TRT	SR2, SR3,SR4SC, SR5S
AS1, AST1	2/32TRT, 2/42TRT	SR3
AS2, AST2	175M, 200S, 200M, 250S, 250M, 320M, 350M, 400S, 400M	SR2, SR3, SR4SC, SR4W, SR5S

Drawings are for dimensional detail only and may not represent actual mechanical

22-1/4

configuration. Dimensions are shown in inches (centimeters) unless otherwise noted. 8-1/4 (21.0)17

DM19AS

DM28AS

DM29AS

DM39AS

DM49AS

AS1/AST1 FPA. 0.7ft2 (.07 m2) 25.9 lbs (11.7 kg) Max. weight:

13

(33.0)

6-1/4 (15.9)

28-1/2 (43.2) AS2/AST2 EPA: 1.2ft2 (1.1 m2) Max. weight: 40 lbs (18.2 kg)

#### Notes

- Specify lamp type and distribution. See Configurations table.
- Not available with SCWA
- 120V only. 3
- 120V and 277V only.
- Not available with 480V
- Not available AS1/AST1 SCWA.
- Must be ordered with SCWA.
- Not applicable with L/LP. 8
- Available in SR3 only.
- 10 Must specify CWI for use in Canada.
- 11 Optional multi-tap ballast (120V, 208V, 240V, 277V). In Canada 120V, 277V, 347V; ships as 120V/347V.
- 12 Consult factory for available wattages.
- 13 Multi-volt electronic ballast (compact

- fluorescent only) capable of operating on any line voltage between 120V and 277V.
- 14 Mounting block included standard.
- 15 Mounted in lens up orientation, fixture is damp location rated. AST available in down orientation only.
- 16 May be ordered as accessory. Not available with AST.
- 17 Must specify finish.
- 18 SF, DF, QRS, EC, or ELDW options cannot be ordered together.
- 19 Maximum allowable wattage lamp included.
- 20 Photocell not included.
- 21 SR2 SR3 SR4W only
- 22 Prefix with fixture name and size (e.g., AS1VG).



# The Archetype<sup>®</sup>

# **Small 70-150W Luminaire**



#### **FEATURES**

- Pulse start metal halide or high pressure sodium technology
- Efficient, effective downward control of light with full uplight cutoff

LS Polycarbonate Lens<sup>2</sup>

HS Houseside shield<sup>3</sup>

HSC Houseside shield for Convex Glass Lens<sup>4</sup>

Neighbor Friendly Backlight Shield⁵

TL Tamper Resistant Latch<sup>6</sup>

AF Air Filter

55IF 55W IF8

**Voltages** 

120 120V

208 208V7

240 V7

277 277V

· Easy-access, tool-less latches for lower maintenance

#### ORDERING INFORMATION (Example)

CAD1

		15A SAK	1	
MOUNTING EPA				
-	1SA	1 Arm Side Mt.	0.7	
	2SB	2 Arm Side Mt.	1.4	
1	2SL	2 Arm Side Mt.	1.2	
-1-	3ST	3 Arm Side Mt.	1.9	
**	3SY	3 Arm Side Mt.	1.9	
	4SC	4 Arm Side Mt.	2.5	
=1	1W	Single Wall Mt.1	_	
		c =1		

SAR - Horizontal

SAR1 Horizontal Type I

SAR2 Horizontal Type II

SAR3 Horizontal Type III

SAR4 Horizontal Type IV

SAR5 Horizontal Type V

NOTE: EPA is for Fixture only

**FIXTURE** 

#### 100PMH120 SG

FI	XTURE FINISH
BL	Black
DB	Dark Bronze
LG	Light Gray
SG	Stealth Gray™
PS	Platinum Silver
WH	White
cc	Custom Color*

ay™ Silver

CC Custom Color\* \*Consult representative

ELECTRICAL MODULE

**70PMH** 70W PMH

**100PMH** 100W PMH

**150PMH** 150W PMH

120 120V

208 208V7

240 240V7

277 277V

347 347V

480 480V

**Voltages** 

A-30

FIXTURE OPTIONS				
A-30	120 Volt photocell			
A-30	120 Volt photocell			
A-31	208 Volt photocell			
A-32	240 Volt photocell			
A-33	277 Volt photocell			

A-34 480 Volt photocell A-35 347 Volt Photocell CGL Convex Glass Lens

**70HPS** 70W HPS

**100HPS** 100W HPS

150HPS 150W HPS

120 120V

208 208V7

240 V7

277 277V

**347** 347V

480 480V PMH = Pulse Start Metal Halide

**Voltages** 

PRA12-5125SA/SG

### POLE / POLE ARM

See p. 766-770 for ordering no., pole and arm EPA.

# SLIPFITTER MOUNTING OPTIONS

	VERTICAL		
4" Roun	4" Round, Standard Fixtures		
VSF-1SA	1 fixture side mt.		
VSF-2SB	2 fixtures side mt. 180°		
VSF-2SL	2 fixtures side mt. 90°		
VSF-3ST	3 fixtures side mt. 90°		
VSF-3SY	3 fixtures side mt. 120°		
VSF-4SC	4 fixtures side mt. 90°		
4" Squa	4" Square, Standard Fixtures		
SVSF-1SA	1 fixture side mt.		
SVSF-2SB	2 fixtures side mt. 180°		
SVSF-2SL	2 fixtures side mt. 90°		
SVSF-3ST	3 fixtures side mt. 90°		
SVSF-4SC	4 fixtures side mt. 90°		
H	HORIZONTAL		
HSF	for Pole Davit Arm		

HPS = High Pressure Sodium IF = Induction Fluorescent <sup>1</sup> Junction box in wall must provide adequate fixture support.

- by UV discoloration from sunlight and metal halide lamps. <sup>3</sup> Recommended for clear lamps only. Not for use with Type V light distributions.
- 4 For use with all fixtures with convex glass lens. Not for use with Type V light distributions.
- <sup>5</sup> Only available wth Type IV reflectors.
- <sup>6</sup> Required only for vandal protection in locations <sup>2</sup> Use only in high-vandalism situations. Useful life is limited where fixtures can be reached by unauthorized
  - persons. Constant wattage isolated ballast is required on all 208V and 240V Canadian orders.
  - 8 55W IF available in type III distribution only.

NOTE: Due to the Energy Independence and Security Act (EISA) of 2007, Kim Lighting can no longer supply probe start Metal Halide ballasts with its luminaires, effective January 1, 2009. Contact Kim Lighting for availability of replacement ballasts for warranty service claims. (Visit www.aboutlightingcontrols.org or the Library of Congress website for more details).

