# **KIM**LIGHTING

kl\_alt180\_spec.pdf

JOB	TYPE
NOTES	APPROVALS

#### **FEATURES**

- PicoPrism® technology¹
- Family of six sizes
- Available in 580nm, 3000K, 4000K and 5000K standard CCT
- Type 1, 2, 3, 4, 5 standard distributions
- 0-10V dimming drivers standard
- IP66 certified

# Certifications



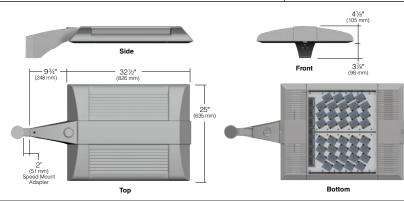


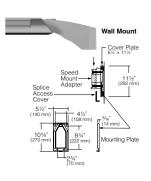


# **SPECIFICATIONS**

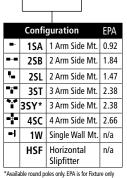


Approx. Weight = 49 lbs. EPA .92 for 1SA. See Mounting for Additional EPAs.





#### **ORDERING CODE**





ALTR Type R, Right

ALTL Type L, Left



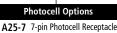
Color Temperature 2K 580nm3 213W at 350mA, **3K** 3000K 416W at 700mA **4K** 4000K 5K 5000K

Electrical Module

**Voltages** 120 120V 208 208V 240 240V **277** 277V 347 347V4 480 480V4

#### **Fixture Finish BL** Black **DB** Dark Bronze GT Graphite LG Light Gray PS Platinum Silver TT Titanium

WH White CC Custom Color\* \*Consult Representative



A30 120V Button Photocell A31 208V Button Photocell

A32 240V Button Photocell

A33 277V Button Photocell A34 480V Button Photocell

A35 347V Button Photocell

# **Fuse Options** 120, 277, 347 Line Volts

Line Volts

**DF** 208, 240, 480 Lens5, 6

# **Lens Option** FGL<sup>5</sup> Flat Glass Lens FPL<sup>5, 6</sup> Flat Polycarbonate

# NFO\* Neighbor Friendly Optic \*Photometry available

**NFO Option** 

for Type III/IV. All others, consult factory.

#### Wireless

WIR-RMI-IO 120-480V, 1000' range, wiSCAPE RF control system with on/off/dim. alerts, monitoring and metering capabilities

# **Control Options**

**Motion** SCL-R Round Pole Mounted Occupancy Sensor up to 16' SCL-S Square Pole Mounted

Occupancy Sensor up to 16' SCH-R Round Pole Mounted Occupancy Sensor 16' to 30'

SCH-S Square Pole Mounted Occupancy Sensor 16' to 30'

# **Control Accessories**

SW7PR<sup>7,8</sup> Site Sync with 7-pin PCR SWUSB SiteSync Software on USB

**SWTAB** SiteSync Windows® Tablet SWBRG SiteSync Wireless Bridge Node

WIR-RME-L wiSCAPE 7-pin Module NXOFM- NX 7-pin Module

1R1D-UNV SiteSync

SiteSync Lighting Control is available from our most popular brands in a broad range

of award-winning product families.

## **Mounting Options**

VSF Vertical Slipfitter Mount for 2" pipe tenon, (2-3/8" O.D.) SVSF Vertical Slipfitter Mount square for 2" pipe tenon,

(2-3/8" O.D.)

Side Arm Mount 3-4RD 3.3" to 4.2" O.D.

round pole 4-6RD 4.5" to 6" O.D. round pole

SQ Square Pole

Microsoft, Encarta, MSN, and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. <sup>1</sup> US Patent No. D674,965 S. Other patents pending.

For Pole Spec Select: http://www.kimlighting.com/products/arms\_and\_poles/

- <sup>2</sup> For custom optics and color temperature configurations, contact factory
- 3 Turtle friendly. Maximum 500mA drive current for 2K amber option.

For Control Spec Select: http://trpssl.com/index.html

- 4 347V & 480V currents may be supplied with step-down transformer
- <sup>5</sup> 350mA only.
- <sup>6</sup> Use only when vandalism is anticipated to be high. Required only for vandal protection in locations where fixtures can be reached by unauthorized persons.
- When ordering SiteSync at least one of these two interface options must be ordered per project.
- 8 If needed, an additional Bridge Node can be ordered.



#### **LUMINAIRE PERFORMANCE**

Spectroradiometric									
	3000K Average	4200K Average	5100K Average						
Color Rendering Index (CRI)	≥75	≥70	≥65						
Power Factor	>.90	>.90	>.90						

Projected Lumen Maintenance								
mA	50,000 hrs	100,000 hrs						
350	96.21%	93.59%						
700	93.35%	89.47%						

Electrical - Drive Current @350mA								
Volts - AC	Amps - AC	System Watts						
120	1.78	213						
208	1.02	213						
240	0.89	213						
277	0.77	213						
347	0.61	213						
480	0.44	213						

Electrical - Drive Current @700mA								
Volts - AC	Amps - AC	System Watts						
120	3.47	416						
208	2.00	416						
240	1.73	416						
277	1.50	416						
347	1.20	416						
480	0.87	416						

B.U.G. Rating (	<b>B.U.G. Rating</b> (TM15) in Lumens where B = Backlight, U = Uplight, G = Glare															
Temperature	TYPE 1	TYPE 1 FGL	TYPE 2	TYPE 2 FGL	TYPE 3	TYPE 3 FGL	TYPE 3 NFO	TYPE 3 NFO FGL	TYPE 4	TYPE 4 FGL	TYPE 4 NFO	TYPE 4 NFO FGL	1 1724 5	TYPEe 5 FGL	TYPE L/R	TYPE L/R FGL
3000K	B5 U0 G5	B5 U0 G5	B4 U0 G4	B4 U0 G4	B3 U0 G5	B3 U0 G4	B3 U0 G4	B3 U0 G3	B1 U0 G5	B1 U0 G5	B1 U0 G4	B0 U0 G4	B5 U0 G4	B5 U0 G4	B3 U0 G5	B3 U0 G5
4200K	B5 U0 G5	B5 U0 G5	B4 U0 G4	B4 U0 G4	B3 U0 G5	B3 U0 G4	B3 U0 G4	B3 U0 G4	B2 U0 G5	B1 U0 G5	B1 U0 G4	B0 U0 G4	B5 U0 G4	B5 U0 G4	B3 U0 G5	B3 U0 G5
5100K	B5 U0 G5	B5 U0 G5	B4 U0 G4	B4 U0 G4	B3 U0 G5	B3 U0 G5	B3 U0 G4	B3 U0 G4	B2 U0 G5	B1 U0 G5	B1 U0 G4	B0 U0 G4	B5 U0 G4	B5 U0 G4	B3 U0 G5	B3 U0 G5

Absolute Lumens																
Temperature	TYPE 1	TYPE 1 FGL	TYPE 2	TYPE 2 FGL	TYPE 3	TYPE 3 FGL	TYPE 3 NFO	TYPE 3 NFO FGL	TYPE 4	TYPE 4 FGL	TYPE 4 NFO	TYPE 4 NFO FGL	TYPE 5	TYPEe 5 FGL	TYPE L/R	TYPE L/R FGL
3000K	23135	18709	23720	19183	23696	19162	18840	15236	23617	19099	19511	15779	23720	19182	20990	16974
4200K	23728	19188	24328	19674	24303	19653	19323	15626	24222	19588	20011	16183	24328	19673	21527	17409
5100K	23999	19407	24606	19899	24581	19878	19544	15805	24499	19812	20240	16368	24606	19898	21773	17608

<b>B.U.G. Rating (TM15)</b> in Lumens where B = Backlight, U = Uplight, G = Glare												
Temperature	TYPE 1	TYPE 2	TYPE 3	TYPE 3 NFO	TYPE 4	TYPE 4 NFO	TYPE 5	TYPE L/R				
3000K	B5 U0 G5	B5 U0 G5	B4 U0 G5	B4 U0 G5	B2 U0 G5	B1 U0 G5	B5 U0 G5	B4 U0 G5				
4000K	B5 U0 G5	B5 U0 G5	B4 U0 G5	B4 U0 G5	B2 U0 G5	B1 U0 G5	B5 U0 G5	B4 U0 G5				
5000K	B5 U0 G5	B5 U0 G5	B4 U0 G5	B4 U0 G5	B2 U0 G5	B1 U0 G5	B5 U0 G5	B4 U0 G5				

Absolute Lumens												
Temperature	TYPE 1	TYPE 2	TYPE 3	TYPE 3 NFO	TYPE 4	TYPE 4 NFO	TYPE 5	TYPE L/R				
3000K	39211	39752	40101	31932	40286	33070	40220	35575				
4000K	40216	40771	41129	32750	41318	33917	41250	36487				
5000K	40676	41237	41599	33124	41790	34305	41722	36904				

<sup>\*</sup> FGL = Flat Glass Lens.

Current - 350mA

Current - 700mA —

LED performance and lumen output continues to improve at a rapid pace. Log onto www.kimlighting.com to download the most current photometric files from Kim Lighting's IES File Library.For custom optics and color temperature configurations, contact factory.



#### **SPECIFICATIONS**

#### Housing:

- Extruded low copper aluminum main body.
- Die-cast low copper aluminum electrical gear compartment.
- Stainless steel hardware.
- Die cast wall separates the optical and electrical compartment acting as thermal barrier.
- Electrical gear compartment doors are fastened with two hinges and a latch made of stainless steel.
- Silicone gaskets seal the compartments at the barrier surface.

# **Optical Module:**

- PicoPrism® refractors (enclosed LED PCBs for IP66 rating) aimed toward the task and spreads horizontally to produce great uniformity.
- Type I, II, III, IV, V, L (left), and R (right) standard distributions. Custom available.
- 3000K, 4000K, 5000K standard CCT.
  Amber and custom available.
- IP66 certified.
- Die-cast, low copper aluminum heat sink modules provide thermal transfer at PCB level.
- Anodized aluminum carrier plate and heat sink modules.

#### **Lens Frame:**

 One-piece low copper aluminum alloy die-cast is secured to housing with two toolless latches.

## **Neighbor Friendly Optic**

 Optional integrated Neighbor Friendly Optic on each LED module to completely control unwanted backlight. Most effective with Type III and IV distibutions.

#### Lens

 One-piece flat glass lens slips into reveal. Extra silicone gasketing is provided to retain a clear optical compartment. CAUTION: Use only when vandalism is anticipated to be high.

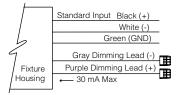
### **Electrical Characteristics:**

- Pre-assembled, aluminum gear tray.
- 120V through 480V @ 50/60Hz.
- Class 2, 350mA or 700mA

- Power Factor = >.90
- National Electrical Code, ANSI/NFPA 70.
- 10kV surge suppression.
- Thermal shield thermal control.
- -30c starting driver.
- 0-10V dimming interface.
- All electronic components are IP66 rated.
- Electronic components are UL and/or CSA recognized.
- Standard programmable driver for variable drive current settings from 350mA to 700mA.

# Dimming:

- 10% to 100% dimming by the use of standard 0-10V interface driver.
- To activate the dimming system, a wiring harness is supplied and attached to the DIM Port (DIM IN) on the thermal shield protection system. This port allows the 0-10V Interface to bypass the thermal shield and control the driver.
- The thermal shield works in conjunction with the control system to assure that overheating will not harm the LEDs.
- The wiring harness is connected with the use of the Purple lead as the positive (+) and the Grey lead as the negative (-) to an available control signal (by others).



#### **Support Arm:**

- Speed Mount and a reinforcing plate are provided with wire strain relief.
- Speed Mount is square or circular cut for specified pole size and shape.
- Die-cast, low copper aluminum support arm for direct pole mount.
- Die-cast aluminum tool-less entry splice access cover
- Terminal block is mounted in the arm cavity and accepts #14 to #8 wire sizes.
- Prewired to electrical module with quick-disconnect plugs located inside the electrical compartment.

- Optional cast, low copper aluminum horizontal slip-fitter with adaptor plate to secure the luminaire to 1-1/4" to 2" IPS pipe size arms.
- Optional cast aluminum wall mount plate assembly. Attaches to the wall over the junction box. Luminaire attaches to the wall plate with a square cut Speed Mount.

#### Finish:

- Fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat.
- Standard colors include (BL) Black, (DB) Dark Bronze, (GT) Graphite, (WH) White, (PS) Platinum Silver, (LG) Light Gray, (TT) Titanium, and (CC) Custom Color (Include RAL#).

# Fusing:

**SF** for 120, 277 and 347 Line Volts **DF** for 208, 240 and 480 Line Volts.

 High temperature fuse holders factory installed inside the fixture housing. Fuse is included.

#### **Certifications and Listings:**

- UL 1598 Standard for wet locations for Luminaires.
- UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products.
- IP66 certified.
- CSA C22.2#250.0 Luminaires.
- ANSI C136.31-2010 3G Vibration tested and compliant.
- RoHS compliant.
- Meets Buy American provisions within ARRA.
- IDA approved, 3000K and warmer CCTs only.

# 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.

# WARRANTY:

 For full warranty see http://www. hubbelllighting.com/resources/warranty



#### **CONTROLS**

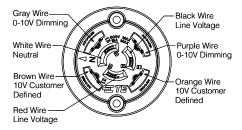
# Photocell Receptacle

#### A25-7

Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others.

Standard customer operation modes:

- **1.** Traditional on/off photoelectric control.
- **2.** 5-pin wireless photoelectric control for added dimming feature.
- 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use.



#### **Button Photocell**

**A30** for 120V, **A31** for 208V, **A32** for 240V, **A33** for 277V, **A35** for 347V, **A34** for 480V,

Photocell is factory installed inside the housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others.

#### wiSCAPE™

Hubbell Building Automation's wiSCAPE In-Fixture Module is a bi-directional wireless RF device that allows an individual fixture to be managed, monitored and metered. The wiSCAPE In-Fixture Module communicates wirelessly over a robust 2.4GHz ISM (Industrial, Scientific and Medical) certified meshed radio signal. The wiSCAPE Fixture Module drastically simplifies control and automation of projects, especially in retrofit environments, and challenges the legacy world of wired-systems. wiSCAPE wireless control technology easily adapts to complex automation situations for quick, simple and economical commissioning. The On-Fixture Module is compatible with A-25-7H option.

#### WIR-RMI-IO

120 - 347V 1000 Foot Range WiScape RF mesh control system with off/on/dim, motion, photo, GPS location, alert, monitoring and metering capabilities.

#### Pole Mounted

# Round Pole-Mounted Occupancy Sensor up to 16' SCL-R

Round Pole-Mounted Occupancy Sensor up to 16' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCL-R41/2772/BL3

# Square Pole-Mounted Occupancy Sensor up to 16' SCL-S

Square Pole-Mounted Occupancy Sensor up to 16' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for square pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCL-L/2772/BL3

# Round Pole-Mounted Occupancy Sensor 16' to 30' SCH-R

Round Pole-Mounted Occupancy Sensor: 16' to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCH-R4<sup>1</sup>/277<sup>2</sup>/BL<sup>3</sup>

# Square Pole-Mounted Occupancy Sensor 16' to 30' SCH-S

Square Pole-Mounted Occupancy Sensor: 16 to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCH-S/277<sup>2</sup>/BL<sup>3</sup>

## SCP

The SCP is a photo-control with motion sensing accessory thats mounts to the side of any new or existing 3"-5" round or square straight pole. The SCP enables any pole mounted luminaire in excess of 75 watts, to meet California Title 24 requirements with integral 20KV/10KA surge protection for added reliability and serviceability. For more detail:

http://www.aal.net/products/sensor\_control\_programmable

<sup>1</sup>Pole Diameter, <sup>2</sup>Voltage, <sup>3</sup>Color