KIM LIGHTING

JOB _____   TYPE _____

NOTES _____   APPROVALS _____

FEATURES

- Independently aimed LEAR™ modules
- 355° rotation and 70° tilt module adjustment and -5° to +30° housing adjustment
- Wide range of drive currents available
- Design software interface for user-defined Type X distribution creation
- Traditional NEMA distributions available
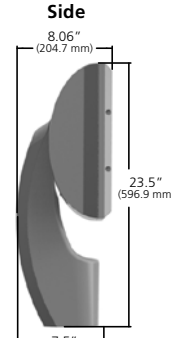- IP66 sealed optical chamber

Certifications

c(UL)us LISTED   IK09   DLC QPL LISTED

SPECIFICATIONS

Max Weight = 38 lbs.

Front
13.75" (349.2 mm)
13.75" (349.2 mm)

Front - EPA 2.03

Side
8.06" (204.7 mm)
23.5" (596.9 mm)
7.5" (190.5 mm)

Side - EPA 1.18

Bottom
6.37" (161.8 mm)

EPA 0.77

ORDERING CODE

ARFX09							
Fixture	**Distribution**	**Electrical Module**			**Fixture Finish**	**Photocell Options**	**Fuse Options**	**NFO Option**

Distribution

WF Wide Flood
VF Vertical Flood
MF Medium Flood
NF Narrow Flood
X[1] Type X — Type X IES File Name

Electrical Module

Color Temperature
3K 3000K
4K 4000K
5K 5000K

Drive Current
35 350mA
40 400mA
45 450mA
50 500mA
55 550mA
60 600mA
65 650mA
70 700mA

Voltages
UV 120-277V
347 347V
480 480V

Fixture Finish

LG Light Gray
BL Black
DB Dark Bronze
GT Graphite
PS Platinum Silver
TT Titanium
WH White
CC[2] Custom Color

Photocell Options

A25-7H[3] 7-pin Photocell Receptacle Horizontal
A25-7V[3] 7-pin Photocell Receptacle Vertical
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

SF 120, 277, 347 Line Volts
DF 208, 240, 480 Line Volts

NFO Option

NFO Neighbor Friendly Optic

Control Options

Wireless

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

Control Accessories

SW7PR SiteSync™ on fixture module
SWUSB[†] SiteSync™ loaded on USB flash drive (Windows® operating system only)
SWTAB[†] SiteSync™ Windows® based Tablet
SWBRG[†] SiteSync™ Wireless Bridge Node
WIR-RME-L wiSCAPE External Fixture Module

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'

Mounting Options

SMT[4] Surface Mount Tenon
SM2[4] Stanchion Mount Tenon
WM2[4] Wall Mount Tenon
MTM-2B Twin Mount Tenon
MTM-3E Triple Mount Tenon

For Pole Spec Select: http://www.kimlighting.com/products/arms_and_poles/
For Control Spec Select: http://trpssl.com/index.html

[1] User-defined distributions must include IES# file where indicated
[2] Custom colors subject to additional charges, minimum quantites and extended lead times. Consult representative.
[3] Indicates mounting position of fixture.
[4] Not for use with MTM-2B or MTM-3E options.

ARFX09 — FLOOD

Distribution Type	Photometrics (3000K)							
Field Angle - 10% max	Lumens							
	350 mA	400 mA	450 mA	500 mA	550 mA	600 mA	650 mA	700 mA
Wide Flood	5984	6566	7268	7876	8485	9074	9662	10251
Vertical Flood	6031	6617	7325	7938	8551	9144	9738	10331
Medium Flood	6192	6955	7520	8150	8779	9389	9998	10607
Narrow Flood	6314	6928	7669	8310	8952	9574	10195	10816

Distribution Type	Photometrics (4000K)							
Field Angle - 10% max	Lumens							
	350 mA	400 mA	450 mA	500 mA	550 mA	600 mA	650 mA	700 mA
Wide Flood	7553	8263	8882	9573	10264	10969	11673	12378
Vertical Flood	7648	8367	8994	9694	10394	11107	11821	12534
Medium Flood	7884	8626	9272	9993	10715	11450	12186	12921
Narrow Flood	8077	8837	9499	10238	10978	11731	12485	13238

Distribution Type	Photometrics (5000K)							
Field Angle - 10% max	Lumens							
	350 mA	400 mA	450 mA	500 mA	550 mA	600 mA	650 mA	700 mA
Wide Flood	7309	8107	8868	9702	10535	11311	12088	12864
Vertical Flood	7479	8295	9074	9927	10780	11574	12369	13163
Medium Flood	7608	8439	9231	10099	10967	11775	12583	13391
Narrow Flood	7921	8786	9611	10514	11418	12259	13101	13942

ELECTRICAL CHARACTERISTICS

Optical System	Electrical										Min. Power Factor	Max THD (%)	Dimming				
	Current	System Watts	Line Voltage		Amps AC								Dimming Range	Source current out of 0-10V purple wire		Absolute voltage range on 0-10V (+) purple wire	
			VAC	Hz	120	208	240	277	347	480				Min	Max	Min	Max
LEAR™	350 mA	62	120-480	50/60	0.51	0.30	0.26	0.22	0.18	0.13	>0.9	20	10% to 100%	0mA	1mA	0V	10V
	400 mA	70			0.58	0.34	0.29	0.25	0.20	0.15							
	450 mA	78			0.65	0.38	0.33	0.28	0.22	0.16							
	500 mA	86			0.71	0.41	0.36	0.31	0.25	0.18							
	550 mA	94			0.78	0.45	0.39	0.34	0.27	0.20							
	600 mA	101			0.84	0.49	0.42	0.36	0.29	0.21							
	650 mA	110			0.91	0.53	0.46	0.40	0.32	0.23							
	700 mA	118			0.99	0.57	0.49	0.43	0.34	0.25							

TM-21 LIFETIME CALCULATION

Optical System	Ambient Environment °C	Projected Lumen Maintenance				Reported L70
		16	26	TM-21 60	100	
LEAR™	25	96%	95%	92%	89%	> 36,000 hrs

LED COLOR

	Spectroradiometric		
	3K	4K	5K
Designation	3000K	4000K	5000K
CRI Minimum	≥72	≥72	≥72
S/P Ratio	1.33	1.66	1.78

Kim Lighting reserves the right to change specifications without notice.   Consult factory for Amber, Turtle Friendly, Gulf Coast and Observatory applications.

SPECIFICATIONS

Housing:

- Low copper aluminum alloy die-casting designed as one-piece with external cooling ribs.

- Solid cast aluminum walls between the housing and arm create a thermal barrier between the optical and electrical compartments.

- Molded silicone gaskets throughout to insure sealing between the two compartments and ingress protection.

- Housing designed with integral Type X thermal transfer "turrets" utilized for both thermal transfer and to secure location of the LEAR™ Optical Module. The turrets are spaced in rows of 3 X 3, designed to optimize photometric performance for standard and Type X user-defined distributions.

- Tempered UV coated flat lens for low glare.

- IK09 rated enclosure protects electrical equipment against external mechanical impacts.

Lens Frame:

- One-piece, die-cast, low copper aluminum alloy secured to housing with eight captive, tamper-resistant stainless steel fasteners.

- Molded silicone gasket assembles into a cast channel in the doorframe sealing the 3/16" thick low iron-content, tempered glass lens against the housing upon closure.

- IP66 certified to protect the interior components from dust and water ingress.

Type X LEAR™ Optical Module:

- Turret alignment and thermal transfer design allow for freedom of adjustability and precision of the LEAR LED array.

- Optimized standard distribution or user-defined beam patterns.

- 3000K, 4000K, 5000K standard CCT. Amber and other custom color temperatures available.

- Facctory adjusted distributions created from user-defined IES files.

- Toolless 355° rotation adjustment and 70° tilt adjustment with a tamper resistant fastener.

- Type X LEAR modules are IP66 rated and utilize six high output LEDs, positioned beneath a precision, high purity molded acrylic prism.
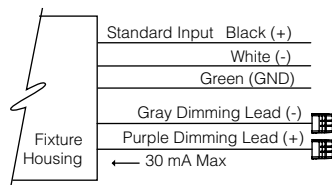
- Targeted optics minimize pixilation concerns to provide outstanding performance, uniformity and glare control.

Electrical Components:

- Standard programmable driver for variable drive current settings from 350mA to 700mA.

- Electrical components are located in the arm. Molded silicon gasket seal to isolate arm from the optical chamber.

- Maximum lightning surge current 20KA with thermally protected varistor technology. Surge suppression is series circuited preventing total fixture failure.

- Open circuit fault will turn off the luminaire protecting the sensitive electronics and acting as a signal for maintenance.

- Programmable Driver is rated for -40°F starting.

- "Thermal Shield" Primary Side thermister Protection for sustainable life of LEAR modules and electronic components.

Dimming:

- Dimming range from 10% to 100% by the use of its standard 0-10V interface on the programmable driver.

- Modular wiring harness in the service area provided for user access to the dimming circuitry.

- Dimming circuitry compatible with 0-10V user-defined control devices.

- Optional factory programmed dimming profile.

Fixture Housing — Standard Input Black (+), White (-), Green (GND), Gray Dimming Lead (-), Purple Dimming Lead (+), ← 30 mA Max

Arm:

- Low copper aluminum alloy, two piece die-casting designed and gasketed to function as one-piece.

- External cooling ribs create continuous aesthetic and thermal path.

- Molded silicone gasket seals the wiring channel separating the arm from the housing thermally insulating the electronic components.

- Internally accessible slip-fitter provided. Attaches to a 1-1/4" to 2-3/8" tenon.

- Luminaire housing adjustable +30° and -5 via locking fastener under the arm cover.

Finish:

- Fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat.

- Standard colors include (BL) Black, (DB) Dark Bronze, (GT) Graphite, (PS) Platinum Silver, (LG) Light Gray, (TT) Titanium, (WH) White, and (CC) Custom Color (Include RAL#).

Fuse Options:

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 arm. Fuse is included.

Certifications and Listings:

- UL 1598 Standard for Luminaires.

- UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products.

- CSA C22.2#250.0 Luminaires.

- ANSI C136.31-2010 3G Vibration tested and compliant.

- RoHS compliant.

- IP66 certified.

- IEC 66262 Mechanical Impact Code IK09.

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

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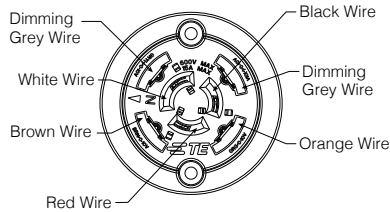HUBBELL® **HUBBELL** Lighting

CONTROLS

Photocell Receptacle

A25-7H or A25-7V

Fully gasketed and wired 7-pin receptacle standard. Easy access location above the electrical compartment. 7-pin construction allows user-defined interface and control definition of operational performance. ANSI twist-lock control module by-others. H (Horizontal) or V (Vertical) indicates mounting position of fixture.

Standard customer operation modes:
1. Tradional on/off photoelectric control.
2. 5-pin wireless photoelectric control for added dimming feature.
3. 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,

Factory installed photocell inside 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.

Wireless Controls

wiSCAPE™

Hubbell Control Solution's wiSCAPE™ wireless control modules allow an individual fixture to managed, monitored and measured. The modules communicate securely over a robust certified meshed radio signal. The wiSCAPE modules provide on/off/dim control, external device input, alerts and metering.

WIR-RMI-IO

wiSCAPE Internal Module, 120-480V, 1000ft range (LOS), 3 Digital Inputs/1 Analog Input, 2 Outputs.

WIR-RME-L

wiSCAPE External Module,120-480V, 1000ft range (LOS), Internal Photocell, 1 Digital Input, Compatible with the A-25-7H option

SiteSync™[1]

SiteSync™ wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. See ordering information or visit www.hubbelllighting.com/products/sitesync for more details.

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-R4[2]/277[3]/BL[4]

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/277[3]/BL[4]

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[2]/277[3]/BL[4]

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[3]/BL[4]

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

[1]PRECOMMISSIONED SITESYNC ORDERING INFORMATION: When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit www.HubbellLighting.com/products/sitesync or contact Hubbell Lighting tech support at (800) 345-4928.

SiteSync fixtures with occupancy sensor (SWPM) require the mounting height of the fixture for selection of the lens.

Examples:

SiteSync only : ARX25/1/3K35UV/PS/US/SWP

SiteSync with Motion Control: ARX25/1/3K35UV/PS/US/SWPM-20F

MOB ORDERING INFORMATION: When ordering a fixture with a dimming occupancy sensor option (MOB), please specify the appropriate information. These settings are specified in the ordering as shown in the example below.

ARX25/1/3k35UV/PS/US/MOB - 1 to 30 min - 33%or 50% - ?? / DBT

High to Dim Delay   Low Level   Mounting Height (ft.)

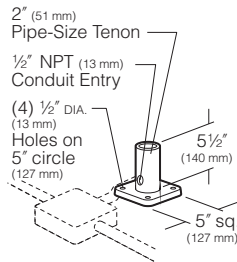[2]Voltage, [3]Color, [4]Pole Diameter,

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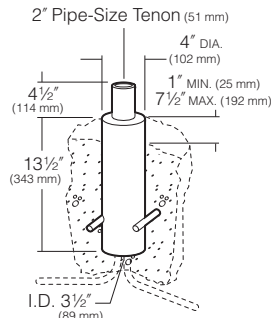## MOUNTING OPTIONS

Surface Mount Tenon

SMT/BL

2" pipe-size tenon (2-3/8" O.D., 2" I.D.). Welded to a cast aluminum plate. Plate has four 1/2" mounting holes, and tenon has one 1/2" NPT for side conduit entry. Black finish.

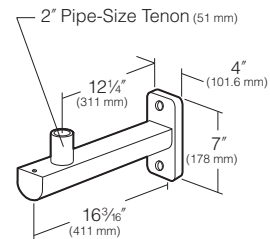### Stanchion Mount Tenon

SM2/BL

2" tenon. 4" O.D. cast low copper (<0.6% Cu) aluminum stanchion with 2" pipe-size tenon (2-3/8" O.D., 1-3/8" I.D.) for mounting a single fixture or multiple top-mounts. Black finish.

Wall Mount Tenon

WM2/BL, WM2/DB, WM2/LG, WM2/SG, WM2/PS, WM2/WH

2" pipe-size tenon (2-3/8" O.D., 2" I.D.). Welded to an extruded aluminum arm with a removable end cap for wiring access. Arm is welded to a cast aluminum plate with two 1/2" mounting holes.
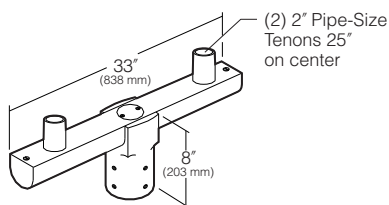

Twin Mount Tenon

MTM-2B/BL, MTM-2B/DB, MTM-2B/LG, MTM-2B/SG, MTM-2B/PS, MTM-2B/WH

Extruded aluminum support continuously welded to a heavy cast aluminum slipfitter hub which cradles the arm for strength. The slipfitter hub contains four recessed 3/8" stainless steel allen head set point screws for mounting to steel pole with steel 2" pipe size tenon (2-3/8" O.D. x 4-1/4"). Cast aluminum end caps and center cap provide access to field splice connections.

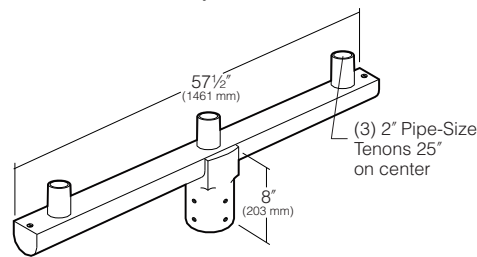**CAUTION:** Approved for mounting to poles with steel tenons only.

Triple Mount Tenon

MTM-3E/BL, MTM-3E/DB, MTM-3E/LG, MTM-3E/SG, MTM-3E/PS, MTM-3E/WH

Extruded aluminum support continuously welded to a heavy cast aluminum slipfitter hub which cradles the arm for strength. The slipfitter hub contains four recessed 3/8" stainless steel allen head set point screws for mounting to steel pole with steel 2" pipe size tenon (2-3/8" O.D. x 4-1/4"). Cast aluminum end caps and center cap provide access to field splice connections.

CAUTION: Approved for mounting to poles with steel tenons only.

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