KIM LIGHTING

ARFX16SP

ArcheType® X Flood Luminaire - Spot

kl_arfx16sp_spec.pdf

JOB _____ TYPE _____

NOTES _____ APPROVALS _____

FEATURES

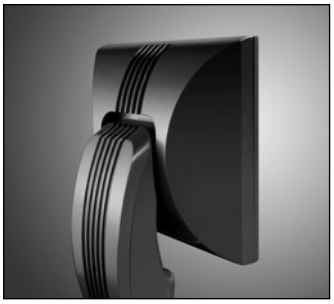
- Independently aimed LEAR™ modules
- 355° rotation and 70° tilt module adjustment and -5° to +30° housing adjustment
- Wide range of drive currents available
- Design software interface for user-defined Type X distribution creation
- Traditional NEMA distributions available
- IP66 sealed optical chamber

Certifications

c UL us LISTED

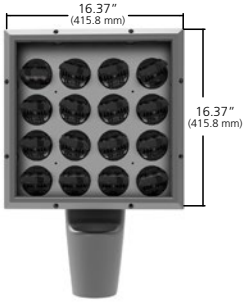
IK09

SPECIFICATIONS



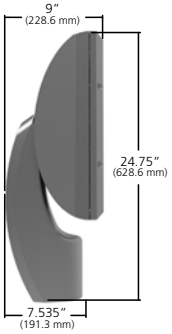
Max Weight = 51 lbs.

Front



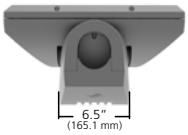
EPA 2.63

Side



EPA 1.35

Bottom



EPA 0.87

ORDERING CODE

ARFX16 | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] | [ ]

Fixture

Distribution

SP Spot

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
75 750mA
80 800mA
85 850mA
90 900mA

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

† When ordering with SiteSync, one of the following interface options must be chosen and ordered separately. Each option contains the SiteSync License, GUI and Bridge Node.

Color Temp Field Angle - 10% max	Photometrics (3000K)											
Drive Current	**350 mA**	**400 mA**	**450 mA**	**500 mA**	**550 mA**	**600 mA**	**650 mA**	**700 mA**	**750 mA**	**800 mA**	**850 mA**	**900 mA**
Lumens	2844	3075	3306	3537	3768	3903	4039	4174	4309	4444	4580	4715
Maximum Candela	50012	54074	58136	62198	66260	68634	71037	73405	75790	78158	80545	82930
Maximum Candela Angle H	0	0	0	0	0	0	0	0	0	0	0	0
Maximum Candela Angle V	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
Horizontal Beam Angle (50%)	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
Vertical Beam Angle (50%)	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2

Color Temp Field Angle - 10% max	Photometrics (4000K)											
Drive Current	**350 mA**	**400 mA**	**450 mA**	**500 mA**	**550 mA**	**600 mA**	**650 mA**	**700 mA**	**750 mA**	**800 mA**	**850 mA**	**900 mA**
Lumens	3874	4216	4558	4900	5242	5488	5735	5981	6227	6473	6720	6966
Maximum Candela	77960	84842	91725	98607	105490	110440	115411	120361	125312	130262	135233	140183
Maximum Candela Angle H	0	0	0	0	0	0	0	0	0	0	0	0
Maximum Candela Angle V	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
Horizontal Beam Angle (50%)	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
Vertical Beam Angle (50%)	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1

Color Temp Field Angle - 10% max	Photometrics (5000K)											
Drive Current	**350 mA**	**400 mA**	**450 mA**	**500 mA**	**550 mA**	**600 mA**	**650 mA**	**700 mA**	**750 mA**	**800 mA**	**850 mA**	**900 mA**
Lumens	4261	4638	5014	5390	5766	6037	6308	6579	6850	7121	7392	7662
Maximum Candela	85748	93348	100909	108469	116120	112386	117425	122465	127522	132561	137618	142656
Maximum Candela Angle H	0	0	0	0	0	0	0	0	0	0	0	0
Maximum Candela Angle V	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
Horizontal Beam Angle (50%)	9.1	9.1	9.1	9.1	9.1	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Vertical Beam Angle (50%)	11.1	11.1	11.1	11.1	11.2	11.9	11.9	11.9	11.9	11.9	11.9	11.9

Optical System	Electrical												Dimming				
	Current	System Watts	Line Voltage		Amps AC						Min. Power Factor	Max THD (%)	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	60	120-480	50/60	0.50	0.29	0.25	0.22	0.17	0.12	>0.9	20	10% to 100%	0mA	1mA	0V	10V
	400 mA	68			0.57	0.33	0.28	0.25	0.20	0.14							
	450 mA	75			0.63	0.36	0.31	0.27	0.22	0.16							
	500 mA	85			0.71	0.41	0.35	0.31	0.24	0.18							
	550 mA	92			0.77	0.44	0.38	0.33	0.27	0.19							
	600 mA	102			0.85	0.49	0.43	0.37	0.30	0.21							
	650 mA	111			0.92	0.53	0.46	0.40	0.32	0.23							
	700 mA	120			1.00	0.57	0.50	0.43	0.34	0.25							
	750 mA	128			1.07	0.62	0.53	0.46	0.37	0.27							
	800 mA	137			1.14	0.66	0.57	0.49	0.39	0.28							
	850 mA	145			1.21	0.70	0.60	0.52	0.42	0.30							
	900 mA	154			1.28	0.74	0.64	0.55	0.44	0.32							

TM-21 LIFETIME CALCULATION*

Optical System	Ambient Environment °C	Projected Lumen Maintenance			Reported L70
		16	26	TM-21 48	
LEAR™	25	91.12%	85.65%	74.75%	> 48,000 hrs

*Projected lifetime from 700mA LM-80 data.

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 4 X 4, 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:

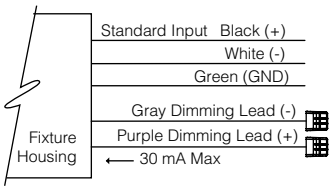
- Turret alignment and thermal transfer design allow for freedom of adjustability and precision of the LEAR LED array.
- Optimized standard distribution or user-defined beam patterns.
- 3000K, 4000K, 5000K standard CCT. Amber and other custom color temperatures available.
- Factory adjusted distributions 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 900mA.
- 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.



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

Kim Lighting reserves the right to change specifications without notice.

CONTROLS

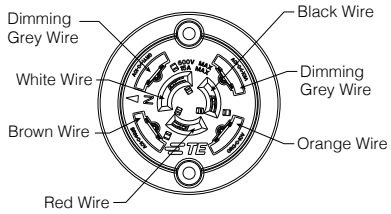
Photocell Receptacle

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.)

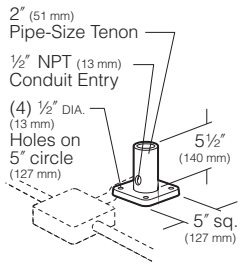
[2]Voltage, [3]Color, [4]Pole Diameter,

Kim Lighting reserves the right to change specifications without notice.

MOUNTING OPTIONS

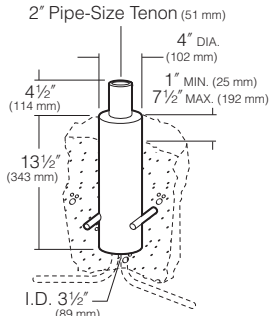
Surface Mount Tenon
SMT/BL

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.



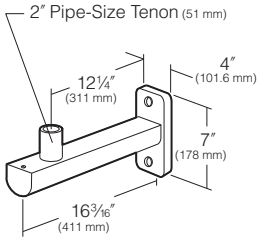
Stanchion Mount Tenon
SM2/BL

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

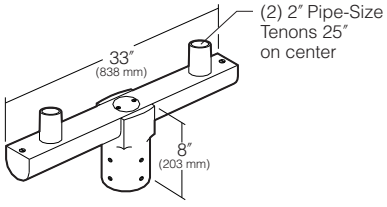
2" pipe-size tenon (2-3/8" O.D., 2" I.D.). Welded to an extruded aluminum arm with a removable end cap for wiring access. Arm is welded to a cast aluminum plate with two 1/2" mounting holes.



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.

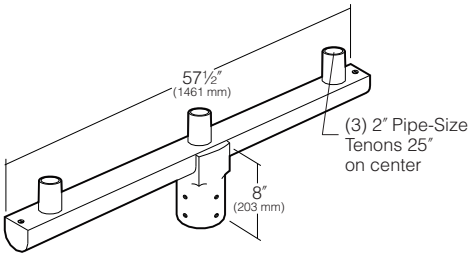
CAUTION: Approved for mounting to poles with steel tenons only.



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.



Kim Lighting reserves the right to change specifications without notice.