

kl_arx09_lens_spec.pdf



JOB	TYPE
NOTES	ΔΡΡΡΟΥΔΙ S

FEATURES

- Independently aimed LEAR™ modules
- 355° rotation and 70° tilt module 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

Front



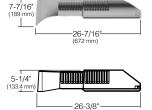




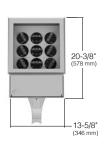


SPECIFICATIONS

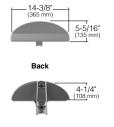




Side



Bottom





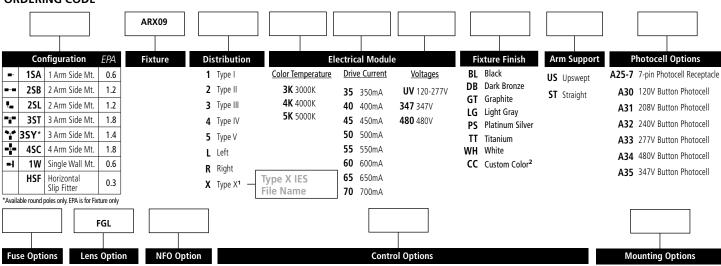
Max Weight = 28 lbs.

Side - EPA 0.842

Front - EPA 0.458

EPA 2.117

ORDERING CODE



120, 277, 347 FGL Flat Glass Lens Line Volts

DF 208, 240, 480 Line Volts

† 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.

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

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

SWP3,4,5 SiteSync Wireless Pre-Commission SWPM^{3,4,5,6}

SiteSync Wireless Pre-Commission w/ Occupancy Sensor

- Control Accessories SW7PR^{4,5} Site Sync with 7-pin PCR
- 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 7-pin Module

NXOFM- NX 7-pin Module 1R1D-UNV

Motion

- SCL Fixture Mounted Occupancy Sensor up to 16'
- Fixture Mounted Occupancy Sensor 16' to 30'
- 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'

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

- 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 SiteSync is not compatable with products using 480V option.
- 4 Not available with other sensor or wireless control options Specify group and zone at time of order. See www.hubbelllighting.com/sitesync for more details. Order at least one SiteSync interface accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node.



Friendly Optic



ARX LEAR™ 3X3 Site/Area

Distribution Type		Photometrics (3000K)																
Field Angle - 10% max		Drive Current																
	350 mA		350 mA		400	mA	450	mA	500	mA	550	mA	600	mA	650	mA	700	mA
	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G		
Type 1	5645	B2 U0 G2	6309	B2 U0 G2	6965	B3 U0 G3	7341	B3 U0 G3	7896	B3 U0 G3	8447	B3 U0 G3	8958	B3 U0 G3	9530	B3 U0 G3		
Type 2	5344	B1 U0 G1	5971	B2 U0 G2	6592	B2 U0 G2	6949	B2 U0 G2	7474	B2 U0 G2	7996	B2 U0 G2	8479	B2 U0 G2	9020	B2 U0 G2		
Type 3	5381	B1 U0 G2	6013	B1 U0 G2	6639	B1 U0 G2	7262	B1 U0 G2	7526	B1 U0 G2	8052	B2 U0 G2	8539	B2 U0 G2	9389	B2 U0 G2		
Type 4	5147	B1 U0 G1	5974	B1 U0 G2	6596	B1 U0 G2	6952	B1 U0 G2	7478	B1 U0 G2	8000	B1 U0 G2	8483	B1 U0 G2	9025	B1 U0 G2		
Type 5	5992	B3 U0 G3	6697	B3 U0 G3	7393	B3 U0 G3	7792	B3 U0 G3	8698	B3 U0 G3	9305	B3 U0 G3	9868	B3 U0 G3	10116	B3 U0 G3		

Distribution Type		Photometrics (4000K)																	
Field Angle - 10% max		Drive Current																	
	350 mA		350 mA		400 mA		450 mA		500	500 mA		550 mA		600 mA		650 mA		700 mA	
	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G			
Type 1	6249	B2 U0 G2	6983	B3 U0 G3	7709	B3 U0 G3	8414	B3 U0 G3	9050	B3 U0 G3	9682	B3 U0 G3	10267	B3 U0 G3	10902	B3 U0 G3			
Type 2	5915	B2 U0 G2	6610	B2 U0 G2	7297	B2 U0 G2	7964	B2 U0 G2	8566	B2 U0 G2	9164	B2 U0 G2	9718	B2 U0 G2	10319	B2 U0 G2			
Type 3	5956	B1 U0 G2	6656	B1 U0 G2	7348	B1 U0 G2	8020	B1 U0 G2	8626	B2 U0 G2	9228	B2 U0 G2	9786	B2 U0 G2	10392	B2 U0 G2			
Type 4	5917	B1 U0 G2	6613	B1 U0 G2	7300	B1 U0 G2	7968	B1 U0 G2	8570	B1 U0 G2	9169	B1 U0 G2	9723	B1 U0 G2	10324	B1 U0 G2			
Type 5	6633	B3 U0 G3	7412	B3 U0 G3	8183	B3 U0 G3	8930	B3 U0 G3	9605	B3 U0 G3	10275	B3 U0 G3	10897	B3 U0 G3	11572	B3 U0 G3			

Distribution Type	Type Photometrics (5000K)																
Field Angle - 10% max		Drive Current															
	350 mA		350 mA 400 mA		mA	450 mA		500 mA		550 mA		600 mA		650 mA		700 mA	
	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	
Type 1	6491	B2 U0 G2	7254	B3 U0 G3	8008	B3 U0 G3	8732	B3 U0 G3	9392	B3 U0 G3	10047	B3 U0 G3	10655	B3 U0 G3	11268	B3 U0 G3	
Type 2	6144	B2 U0 G2	6866	B2 U0 G2	7580	B2 U0 G2	8265	B2 U0 G2	8890	B2 U0 G2	9510	B2 U0 G2	10085	B2 U0 G2	10666	B2 U0 G2	
Type 3	6187	B1 U0 G2	6914	B1 U0 G2	7633	B1 U0 G2	8323	B1 U0 G2	8952	B2 U0 G2	9577	B2 U0 G2	10156	B2 U0 G2	10741	B2 U0 G2	
Type 4	6147	B1 U0 G2	6869	B1 U0 G2	7584	B1 U0 G2	8269	B1 U0 G2	8894	B1 U0 G2	9515	B1 U0 G2	10090	B1 U0 G2	10671	B1 U0 G2	
Type 5	6890	B3 U0 G3	7700	B3 U0 G3	8500	B3 U0 G3	9268	B3 U0 G3	9969	B3 U0 G3	10665	B3 U0 G3	11310	B3 U0 G3	11961	B3 U0 G3	

Electric	Electrical Characteristics Di										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						
	watts	VAC	Hz	120	208	240	277	347	480	lactor	(70)	Kunge	Min	Max	Min	Max					
350 mA	62			0.51	0.30	0.26	0.22	0.18	0.13												
400 mA	70								0.58	0.33	0.29	0.25	0.20	0.15]						
450 mA	78			0.65	0.37	0.32	0.28	0.22	0.16		20	10% to 100%	0mA	1mA	OV	10V					
500 mA	86	120 400	F0/C0	0.71	0.41	0.36	0.31	0.25	0.18												
550 mA	94	120-480	50/60	0.78	0.45	0.39	0.34	0.27	0.20	>0.9											
600 mA	101			0.84	0.49	0.42	0.37	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	Ordering	Ambient Environment °C	Pro	Reported L70					
	System	Code		16	26	TM-21 60	100	Reported L70		
	LEAR™	ARX09	15°	98	97	95	93			
			25°	96	95	92	89	>60Khrs		
			40°	96	95	92	89			

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LED COLOR

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

Consult factory for Amber, Turtle Friendly, Gulf Coast and Observatory applications.





SPECIFICATIONS

Housing:

- Low copper aluminum alloy die-casting is designed as one-piece and has external cooling ribs.
- Solid, cast aluminum, wall creates a thermal barrier between the optical and electrical compartments.
- A molded silicone gasket throughout insures the sealing between the two compartments and provides ingress protection.
- Housing is designed with integral LED module "turrets" utilized for both thermal transfer and for securing the location of each LEAR™ Optical Module. The turrets are spaced in rows of 3 X 3 and are designed to optimize photometric performance for standard and Type X user-defined distributions.
- IP66 certified to protect the optical chamber from dust and water ingress.
- IK09 rated enclosure protects electrical equipment against external mechanical impacts.

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.

Type X LEAR™ Optical Module:

- Turret alignment and thermal transfer design allows for freedom of adjustability and precise aiming of the LEAR LED array.
- Optimized standard distribution or userdefined 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 tamper resistant fastener.
- Type X LEAR modules are IP66 rated and utilize six high output LEDs positioned beneath a precise, high purity molded acrylic prism.

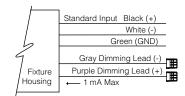
 Targeted optics minimize pixilation concerns and provide outstanding performance, uniformity and glare control.

Electrical Components:

- Standard programmable driver allows for programmable drive current settings ranging from 350mA to 700mA.
- Electrical components are stategically located in the driver gear compartment with a molded silicon grommet seal to provide separation 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 in order to protect the sensitive electronics and acts as a signal for maintenance.
- Programmable Driver is rated for -40°C starting.
- "Thermal Shield", primary side, thermister provides protection for the sustainable life of LEAR modules and electronic components.

Dimming:

- Dimming range from 10% to 100% through the use of the standard 0-10V interface on the programmable driver.
- Modular wiring harness in the service area provides user access to the dimming circuitry.
- Dimming circuitry compatible with 0-10V, user-defined, control devices.
- Optional factory programmed dimming profile.



Support Arm:

- Die-cast, low copper aluminum alloy, with splice access cover.
- Die-cast pole adaptor and an internal reinforcing plate are provided with a wire strain relief.
- The arm adapter is square or circular cut for specified pole size and shape.
- For field wire connections, a terminal block is mounted in the arm cavity and accessible behind the splice access cover. The block accepts #14 to #8 wire sizes and is factory prewired to the electrical module's quick-disconnect plug inside the electrical compartment.

Optional Slip-Fitter:

■ Internally accessible slip-fitter attaches to a 1-1/4" to 2-3/8" tenon and allows hands-free wiring and maintenance.

Optional Wall Mount:

 Optional, cast aluminum mounting plate attaches to a wall over a junction box and the speed mount is bolted to the cover plate. To complete the wiring, the luminaire assembly slides over the mounting plate.

Fusing:

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

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

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#).

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 4G Vibration tested and compliant.
- RoHS compliant.
- IP66 certified.
- IEC 66262 Mechanical Impact Code IK09.
- 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

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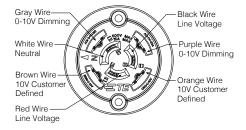
Controls

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.

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.

Fixture-Mounted

Fixture-Mounted Occupancy Sensor up to 16' SCL

Fixture-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.

Ordering Example: SCL/2772/BL3

Fixture-Mounted Occupancy Sensor 16' to 30' SCH

Fixture-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.

Ordering Example: SCH/277²/BL³

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-R44/2772/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-R44/2772/BL3

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/2772/BL3

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

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.

xamples:

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.)

²Voltage, ³Color, ⁴Pole Diameter,

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