ARCEOS™ ARS SERIES

SURFACE/CEILING/GARAGE

Cat.# Job



Approvals

SPECIFICATIONS Intended Use:

Ceiling applications from eight to eighteen feet for surface, box or pendant mount. Applications include parking garage, walkway or building canopies, corridors, tunnels, large stairwells and other interior applications with ambient 40°C. A wide range of lumen packages and optical distributions are available making the ARS Series luminaire both versatile and functional.

Construction:

- · Die cast aluminum housing features vertical fins for two directional air flow that maximizes heat dissipation and ensures long electrical component life and luminaire performance
- · LED light engines and electrical compartment are thermally isolated with an air gap for optimum component performance and long life
- · One piece molded silicone gasket ensures weather proof seal around each individual LED; Stamped stainless steel bezel provides mechanical compression to seal the optical assembly; 18L and and 24L luminaires include finish (color) matching blanking bezel
- · IP65 luminaire rating
- · Vandal resistant polycarbonate and low brightness acrylic shield accessories available

- · Light engine is hexagonal LED module containing 6 high output LEDs with PMMA acrylic lenses that create precise photometric performance
- · Choice of multiple light outputs based on quantity of hexagonal LED arrays: 3 = 18 LEDs, 4 = 24 LEDs or 6 = 36 LEDs hexagonal LED modules, lumen range 4.000-8.600
- Three distribution types: Type V Square (5M), Type V Rectangular (5R) or Type IV (4)
- Type V Rectangular (5R) lenses provides low brightness "drive aisle optics" solution for low mounting height applications when the lens is oriented perpendicular to the flow of traffic
- · Variety of color temperatures offered: 3000K (80CRI), 4000K (70CRI) or 5000K (70 CRI) CCT

· Each hexagonal light engine comes with a connector for easy replacement

Type

Electrical:

- 120V-277V 50/60Hz, 54.4W, 57W or 86W 700mA configurations
- · Drivers RoHS compliant and IP66
- · 0-10V dimming drivers
- Lumens per watt > 92-102
- · Designed and certified for 40°C ambient temperatures
- Thermal management protection device shuts driver/LED systems off when temperatures are too high
- Operating temperature range -30°C/-22°F -40°C/104°F
- Surge protection 20KA; Turns fixture off at end of life; Includes LED for end of life indication (see surge suppressor page 3)

Controls/Options:

- Occupancy Sensors, photocells controls available for on/off or dimming operation
- · wiSCAPE in fixture wireless control module, features dimming, switching motion sensor
- · Up light option available in 24L and 36L configurations

Installation:

Quick disconnect plate mounts over standard junction box and allows for simplified fixture installation, A 3/4" hub provides pendant stem mounting making the fixture adaptable to a variety of applications. Each mounting can be accomplished while maintaining a watertight seal. Four ½" conduit hubs allow side access as required. A pattern indicator on the mounting plate allows the installer to properly orient the fixture without energizing the light engines.

Listings:

Listed to UL 1598 for use in wet locations, 40° C ambient environments: Meets DesignLights Consortium (DLC) qualifications 4K & 5K models only, Consult DLC website for more details: http://www.designlights.org/QPL; IP65

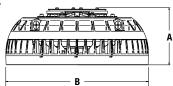
Warranty:

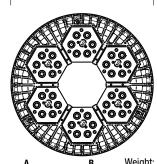
Five year limited warranty (for more information visit: http://www.hubbelllighting.com/resources/warranty/

PRODUCT IMAGE(S)

Shown with motion control option

DIMENSIONS





Α	В	Weight:		
5.68"	14.00"	18 lbs		
(144.22 mm)	(355.6 mm)	8.16 ka		

CERTIFICATIONS/LISTINGS



IP65



24L 24 LEDs

¹833 only available in 18L drive current ²Specify voltage for voltage specific options (only 120V-277V available for Fusing) ³0-10V fully adjustable dimming with automatic daylight calibration and different time

delay settings; Must order minimum of one SCP-REMOTE to program dimming settings

4 One per LED module e.g. 3 – 18L, 4 – 24L, and 6 – 36L luminaires (see page 3)

5 PC option not applicable, included in sensor. For SCP, PC function turns on to lower





ORDERING INFORMATION ORDERING EXAMPLE: ARS-36L5K-070-5M-1-DB-PC

ARS FINISH **OPTIONS SERIES NUMBER OF LEDS LED COLOR** DRIVE **IES DISTRIBUTION** VOLTAGE² **CURRENT** PC² 3K 3000K 5M Type V Square **U** 120V-ARS Arceos™ 181 181 FDs

garage luminaire **36L** 36 LEDs ACCESSORIES - Order separately

surface/ceiling/

070 700mA 4K 4000K **5K** 5000K 0831 833mA

5R Type V Rectangle

5W Type V Wide

4 Type IV

3 240V 4 277V

277V

1 120V

2 208V

DR Bronze **BL** Black

WH White

PS Platinum Silver GR Grav

FG Forest Green

RD Red

CC Custom Colors (Consult factory) **Controls Guide**

Photocontrol (voltage specified and determined by voltage field) F2 Fusing (voltage specified and determined by voltage field)

Up light option, available in 24L and 36L only (see page 3) WIR wiSCAPE, In-fixture wireless

control module

MOTION CONTROL OPTIONS

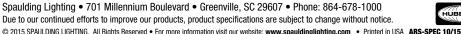
SCP^{2,3,5} High/low control - for up to 20' mounting heights user programmable settings; Factory default is 10%

SCPW2,3,5 High/low control - wide lens for up to 8' mounting heights



setting until motion is detected

See page 2 and 3 for Accessories





ACCESSORIES/REPLACEMENT PARTS - Order Separately

Catalog Number	Description				
ARS-SPC⁴	Vandal shield (1 per LED module)				
ARS-BS-XX*	Bird shield				
ARS-CS4 Comfort shield - Reduces source brightness and imagining P95 acrylic with nominal 10% lumen reduction (1 per LED module)					
SCP-REMOTE ³	Remote control for SCP option; order at least on per project to program and control				
93052458 20KA surge protection with an end of life LED indicator					
CX = Color Options: DB, BL, WH, PS and GR					

PHOTOMETRICS Type V Wide - ARS-36L5K-5W Type V Rectangle Drive Aisle Optic ARS-36L5K-5R Type V Square - ARS-36L5K-5M Type IV - ARS-36L5K-4 3fc 5fc 3fc 1fc

PERFORMANCE DATA				5K			4K						
					(5000K nominal, 67 CRI)				(4000K nominal, 70 CRI)				
# LED'S	DRIVE CURRENT (MILLIAMPS)	SYSTEM WATTS	DISTRIBUTION Type	LUMENS	LPW ¹	В	U	G	LUMENS	LPW ¹	В	U	G
	18 (833 MA)	54.4W	4	4300	79	1	0	2	4,083	75	1	0	2
18			5M	4425	81	1	0	2	4,208	77	1	0	2
,			5R	4725	87	1	0	2	4,508	83	1	0	2
	24	57W	4	5360	94	1	0	2	4986	87	1	0	2
24			5M	5485	96	2	0	1	5012	88	2	0	1
	STD.		5R	5800	102	3	0	3	5375	94		- - -	
	(700 MA)	86W	4	7966	93	1	0	2	7522	87	1	0	2
36			5M	8203	95	3	0	1	7439	87	3	0	1
			5R	8604	100	3	0	3	8030	93			

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

PROJECTED LUMEN MAINTENANCE

AMBIENT				¹TM-21-11		Calculated L70
TEMP.	0	25,000	50,000	60,000	100,000	(HOURS)
10°C / 50°F	1.01	1.00	0.99	0.99	0.97	>1,085,000
25°C / 77°F	1.00	0.99	0.98	0.98	0.96	>1,085,000
40°C / 104°F	0.97	0.96	0.96	0.95	0.94	>782,000

¹ Projected per IESNA TM-21-11 Data references the extrapolated performance projections for the ARS-36LU-5K base model in a 40°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

ELECTRICAL DATA

# OF LEDS	NUMBER OF Drivers	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
18	1	(833 MA) STD. (700 MA)	120	54.5	0.50
	-		277	56.8	0.22
24	2		120	57	0.48
24			277	59	0.24
36	3		120	86	0.73
30			277	89	0.35

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

AMBIENT TEMP	LUMEN MULTIPLIER	
0° C	32° F	1.02
10° C	50° F	1.01
20° C	68° F	1.00
25° C	77° F	1.00
30° C	86° F	1.00
40° C	104° F	0.99

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).





VERSATILE CONFIGURATIONS







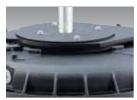
ARS-18LU ARS-24LU

ARS-36LU

MOUNTING OPTIONS & ACCESSORIES



Specially designed internal hook and hinge allows easy access to wiring and internal components for easy installation



Pendant mount with 3/4" wiring hub; Bird shield accessory available; J-Box mounting slots and wire way accommodate 3 1/2" and 4" J-Box designs



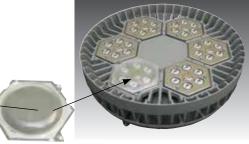


Four – $\frac{1}{2}$ " wiring hubs for surface conduit wiring and photocell option



ARS-SPC - Clear vandal shield installs over each hexagonal LED bezel with 3 provided screws, specify quantity when ordering:

- 3 for 18L
- 4 for 24L
- 6 for 36L



ARS-CS - Frosted comfort shield installs over each hexagonal LED bezel with 3 provided screws, improved uniformity and reduced LED brightness, specify quantity when ordering:

- 3 for 18L
- 4 for 24L
- 6 for 36L



Up light option provides ambient light reducing the "cave effect" in parking garage applications (available in 24L and 36L only)

SURGE PROTECTION

- Field replaceable surge protection device (SPD) provides 20KA and 10KV protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3
- The SPD is designed with a clamping voltage of 1600V at 20KA using industry standard 8/20µs waveform
- Max surge current = 20,000 Amps (see table)
- LED Indicator Green LED is unlit at end of life

Pulse Rating						
(8 x 20 μSec)						
Strikes Surge						
1	20,000 A					
2	15,000 A					
15	10,000 A					
120	3,000 A					

ruise	naully		Chons	
(8 x 20	μSec)	I _n	10KA	
rikes	Surge			
1	20,000 A			
2	15,000 A			

5KA