

The Simkar Salient™ LED area & site luminaires utilize high brightness LEDs and precision optics to provide superior uniformity and maximize pole spacings while using up 60% less energy and operating for 60,000 hours (L70).

Designed to replace 150W to 400W PSMH fixtures in area, roadway, and security lighting applications, the versatile SAL LED area & site luminaires are available in 4 sizes/lumen packages, 8 distributions, and 7 mounting options.

- Precision optics; 8 distributions
- Sleek architectural design
- Up to 60% energy savings vs. traditional HID sources
- 60,000 hour operating life (L70)

HOUSING / OPTICS Die cast and extruded aluminum housing available in bronze powder coat finish utilizes linear heat dissipating fins for superior cooling and durability. Housing has K0s on top and bottom for photocell or motion sensors. Hinged door, secured by two allen head screws, provides quick access to gasketed wiring compartment. Separated optical and eletrical compartments for cooler operation and maximum system life. LED modules are enclosed via gasketed, UV-stabilized polycarbonate precision lenses, available in NEMA Type II, III, IV, and V distributions. Available with factory-installed optional backlight shielding for 85% backlight reduction. The full cut-off SAL series produces no uplight and is nighttime friendly.

**LEDS** SAL area lights utilize 32, 48, 64, or 96 high power NICHIA LEDs on conformal coated metal core boards, and are 5-step binned for color consistency. SAL is available in 4 sizes and light levels (delivered): *SALXS*: 9,060 lumens (32 LEDs, 73W); *SALS*: 13,600 lumens (48 LEDs, 107W); *SALM*: 17,800 lumens (64 LEDs, 140W); *SALL*: 23,500 lumens (96 LEDs, 188W). 5000K 70 CRI (standard). Also available in 3000K and 4000K 70 CRI. Consult factory for lead time. Operating life is up to 60,000 hours (L70). LEDs are LM-80 tested.

**ELECTRICAL** Power supplies are 120-277V (U1) or 347-480V (U3), 0-10V dimmable. Power factor is >0.9. Power supplies are mounted in direct contact with aluminum housing for cooler operation and longer life. 73W units use 1400mA PSU. 107W units use 2100mA PSU. 140W units use 2800mA PSU. 188W units use 4200mA PSU. 6kV integral surge protection. Additional 10kV inline field-replaceable surge protector (included).

- Available in 3000K, 4000K, and 5000K (standard)
- Excellent color rendition. >70 CRI
- DesignLights Consortium® listed, DLC 4.0/4.1

**TEMPERATURE** The SAL series is suitable for use in operating temperatures from -31°F (-35°C) to 104°F (40°C).

**ACCESS / WIRING** Power supplies are located in a separate compartment accessed via (2) captive 1/8" allen head screws. Top and bottom KOs provided for optional twist-lock photocell and multi-level motion sensors with built-in photocell.

**MOUNTING** Multiple mounting accessories are available for the SAL for pole or wall mounting. Mounting accessories are sold separately. The recommended mounting heights are SALXS 10-15 ft., SALS 15-20 ft., SALM 20-25 ft., and SALL 25-35 ft. The SAL series supports wider pole spacings of 8.5 times mounting heights. The Effective Projected Area (EPA) for the SAL fixtures mounted in a horizontal area light orientation using the square pole mount accessory is SALXS .55 sq. ft., SALS .62 sq. ft., SALM .67 sq. ft and SALL .79 sq. ft. The Effective Projected Area (EPA) for the SAL fixtures mounted in an angled floodlight orientation using the adjustable slip fitter is SALXS 1.27 sq. ft., SALS 1.42 sq. ft., SALM 1.56 sq. ft and SALL 1.85 sq. ft. **Product Weight:** SALXS (111bs), SALS (12.9lbs), SALM (13.8lbs) and SALL (17.5lbs).

**LISTINGS** C-UL-US Listed wet location. 3G vibration rated for ANSI C136.31 high vibration applications. DesignLights Consortium® qualified, DLC 4.0/4.1. IP 65 rated. Title 24 compliant configurations available; contact factory.

**WARRANTY** 5 year limited warranty.

# Project Catalog Number

Date















# Salient™ LED Area & Site Luminaires Configuration

	<del></del>		<del></del>	
SERIES	SIZE/LUMENS*	DISTRIBUTION	COLOR TEMPERATURE	VOLTAGE
SAL	XS = 15" Extra Small (9,060 lm, 73W)	2 = Type II	<b>30</b> = 3000K**	<b>U1</b> = Universal 120-277V
	S = 17" Small (13,600 lm, 107W)	3 = Type III	<b>40</b> = 4000K**	<b>U3</b> = Universal 347-480V
	M = 19" Medium (17,800 lm, 140W)	4 = Type IV	<b>50</b> = 5000K (standard)	
	<b>L</b> = 23" Large (23,500 lm, 188W)	<b>5</b> = Type V		

Please refer to Designlights Consortium® website for specific configuration listings.

<sup>\*\*</sup>Contact factory for lead times

OPTIONS	ACCESSORIES
(x)(y)P = Twist and Lock Photocell;	AFSAL = Adjustable slip fitter, bronze
designate voltage: 1 = 120V, 2 = 277V, 5 = 480V	BGSAL = Stainless steel bird guard
5 = Twist lock receptacle, 5 pin**	RP3SAL = 3" Round pole mounting arm, bronze
7 = Twist lock receptacle, 7 pin**	RP4SAL = 4" Round pole mounting arm, bronze
<b>DS</b> = Motion sensor / integrated photocell*	RP5SAL = 5" Round pole mounting arm, bronze
SALBLS = Back Light Shielding	SPSAL = Square pole (3", 4", and 5") mounting arm, bronze
	TASAL = Horizontal tenon mount 2" IP, 2.375" OD, bronze
	WMPSAL = Wall mount plate, bronze

<sup>\*</sup>Twist lock photocell is standard with 3 pin receptacle unless otherwise specified

Option (x)(y)P: (x) = voltage selection and <math>(y) = receptacle pin selection.



SALS with optional backlight shielding for reduced house-side illumination (factory installed)



<sup>\*</sup>See performance tables for actual performance

<sup>\*\*</sup>Photocell not included unless ordered

## Performance Data

Model	Distribution	Limbs Output	Input	Efficació	Drive	Bl	JG Rati	ng	Color	Operating Life	Operating	HID		
Model	Distribution	Light Output	Power	Efficacy	Current	В	U	G	Temperature	(L70)	Temperature	Equivalent		
	Type II	7,643.5 lm	72.01 W	106.5 Lpw	1400 mA			В3	U0	G3				
SALXS	Type III	8,980 lm	72.83 W	123.3 Lpw		B2	B2 U0 G2	G2	G2 G2			1E0\A/ DCA4LL		
(15")	Type IV	9,066 lm	72.75 W	124.61 Lpw		B2	U0	G2				150W PSMH		
	Type V	9,250 lm	72.56 W	127.49 Lpw		В3	U0	G1						
	Type II	12,942 lm	105.1 W	123.13 Lpw	2100 mA	В3	U0	G3						
SALS	Type III	11,756 lm	107.1 W	109.76 Lpw		В3	U0	G3				250W PSMH		
(17")	Type IV	13,652 lm	107.3 W	127.23 Lpw		В3	U0	G3						
	Type V	13,931 lm	107.5 W	129.65 Lpw				В3	U0	G1	EOOOK	CO 000 bro	-31°F (-35°C) to	
	Type II	17,048 lm	137.9 W	123.59 Lpw	2800 mA			В3	U0	G3	5000K	60,000 hrs	104°F (40°C)	
SALM	Type III	16,377 lm	141.7 W	115.52 Lpw		В3	U0	G3				220/4/ DCM 11		
(19")	Type IV	17,853 lm	140.7 W	126.88 Lpw		- 2800 MA	В3	U0	G3				320W PSMH	
	Type V	18,831 lm	142.7 W	131.97 Lpw		B4	U0	G1						
	Type II	23,957 lm	189.9 W	126.13 Lpw	4200 mA		B4	U0	G4					
SALL	Type III	24,646 lm	186.8 W	131.93 Lpw		B4	U0	G4	]			400/4/ DCM		
(23")	Type IV	22,862 lm	181.9 W	121.6 Lpw		В3	U0	G3				400W PSMH		
	Type V	25,855 lm	188.4 W	137.23 Lpw		B4	U0	G1						

## **Mounting Accessories**



**SPSAL** Square pole arm for 3", 4", and 5" square poles Bronze finish



**RP3SAL** 3" Round pole arm Bronze finish



**RP4SAL** 4" Round pole arm Bronze finish



**RP5SAL** 5" Round pole arm Bronze finish



**AFSAL** Adjustable slip fitter Bronze finish



**TASAL** Horizontal tenon mount, 2" IP, 2.375" OD Bronze finish



**WMPSAL** Wall mount plate Bronze finish

# **Options (factory installed)**



**SALBLS Back Light Shielding** Steel shield Black finish

#### Accessories

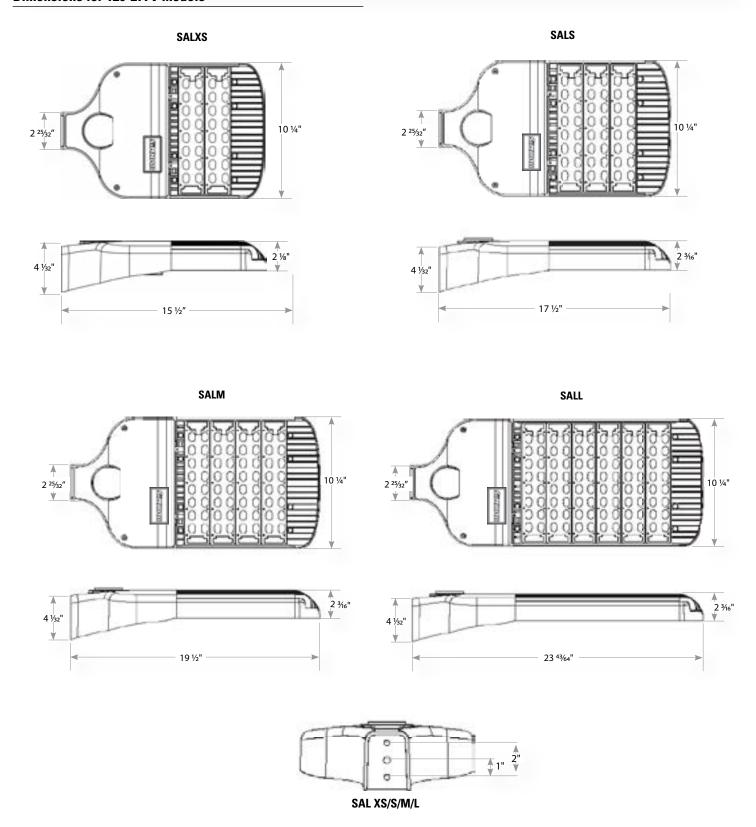


**BGSAL** Stainless Steel Bird Guard



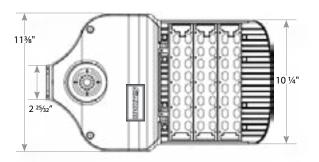
<sup>\*</sup> Delivered lumens \*\* Consult a lighting engineer to meet specific requirements

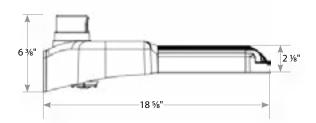
# **Dimensions for 120-277V models**



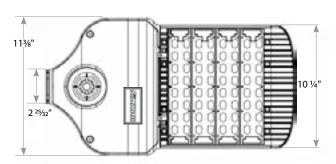
# Dimensions for 347-480V models (shown with optional controls)

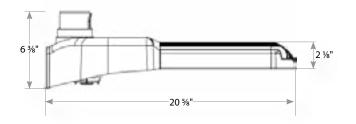
# SALS



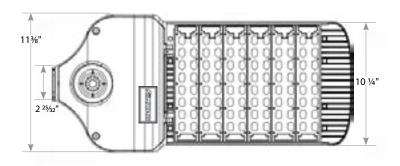


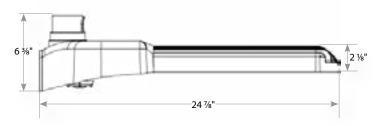
#### SALM

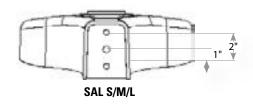




#### SALL





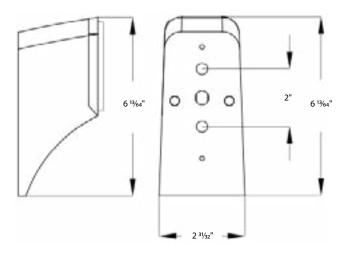




# **Dimensions for Mounting Accessories**

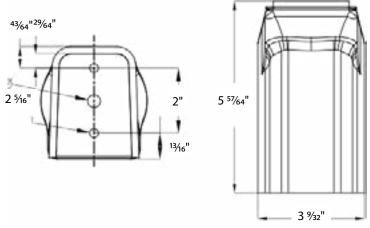
## **SPSAL**

Square pole arm for 3", 4", and 5" square poles



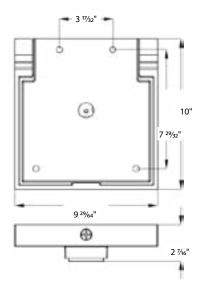
#### **TASAL**

Horizontal tenon mount



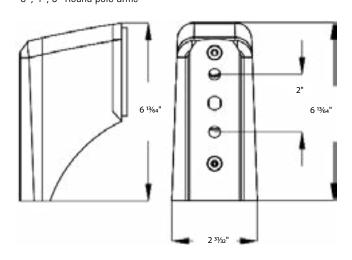
#### **WMPSAL**

Wall mount plate



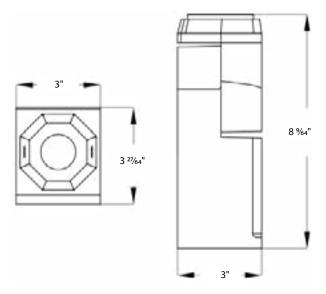
#### RP3SAL, RP4SAL, RP5SAL

3", 4", 5" Round pole arms

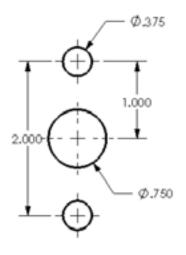


#### **AFSAL**

Adjustable slip fitter



#### **MOUNTING PATTERN**



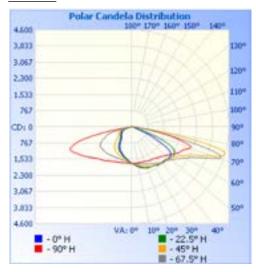


#### Photometric Data

#### Luminaire Data SALXS 73W 5000K | Type IV

Catalog Number	SALXS450U1
Lab Test#	GZE151038-01S
(#) Power Supply	(1) Constant Current 1400mA
# LEDs	32 white LEDs
Color Temperature	5000K
Input Watts	72.75W
Delivered Lumens	9,066
Operating Life	60,000 hrs. (L70)
Fixture Efficacy	124.61 lm/W

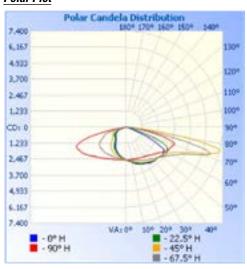
#### **Polar Plot**



# Luminaire Data SALS 107W 5000K | Type IV

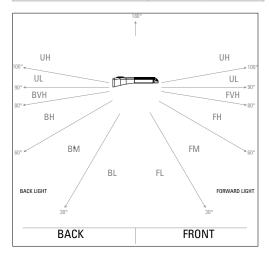
Catalog Number	SALS450U1
Lab Test#	GZE151038-01C
(#) Power Supply	(1) Constant Current 2100mA
# LEDs	48 white LEDs
Color Temperature	5000K
Input Watts	107.3W
Delivered Lumens	13,652
Operating Life	60,000 hrs. (L70)
Fixture Efficacy	127.3 lm/W

## Polar Plot



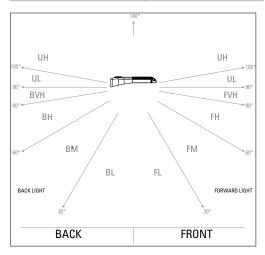
#### IES BUG ratings (backlight, uplight, glare) Per IES TM-15-11

SALXS450U1		
Luminaire Classification System	Lumens	Luminaire %
FL (0-30 Degrees)	831.06	9.2%
FM (30-60 Degrees)	2700.1	29.8%
FH (60-80 Degrees)	2435.5	26.9%
FVH (80-90 Degrees)	101	1.1%
BL (0-30 Degrees)	636.01	7.0%
BM (30-60 Degrees)	1418.6	15.6%
BH (60-80 Degrees)	907.38	10.0%
BVH (80-90 Degrees)	36.293	0.4%
UL (90-100 Degrees)	0	0.0%
UH (100-180 Degrees)	0	0.0%
Total	9,065.4	100%
BUG Rating	B2 U0 G2	



#### IES BUG ratings (backlight, uplight, glare) Per IES TM-15-11

SALS450U1		
<b>Luminaire Classification System</b>	Lumens	Luminaire %
FL (0-30 Degrees)	1205.0	8.8%
FM (30-60 Degrees)	4012.3	29.4%
FH (60-80 Degrees)	3806.0	27.9%
FVH (80-90 Degrees)	250.95	1.8%
BL (0-30 Degrees)	948.1	6.9%
BM (30-60 Degrees)	2107.2	15.4%
BH (60-80 Degrees)	1267.4	9.3%
BVH (80-90 Degrees)	54.24	0.4%
UL (90-100 Degrees)	0.0	0.0%
UH (100-180 Degrees)	0.0	0.0%
Total	13,645.3	100.0%
BUG Rating	B3 U0 G3	



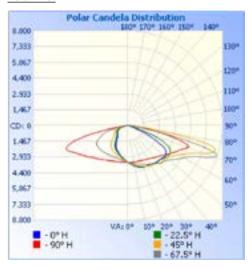


#### Photometric Data

#### Luminaire Data SALM 140W 5000K | Type IV

Catalog Number	SALM450U1
Lab Test#	GZE131038-01G
(#) Power Supply	(1) Constant Current 2800mA
# LEDs	64 white LEDs
Color Temperature	5000K
Input Watts	140.7W
Delivered Lumens	17,853
Operating Life	60,000 hrs. (L70)
Fixture Efficacy	126.88 lm/W

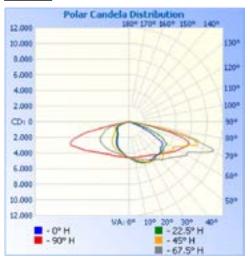
#### **Polar Plot**



#### Luminaire Data SALL 188W 5000K | Type IV

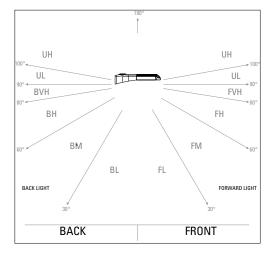
Catalog Number	SALL450U1
Lab Test#	GZE151038-01K
(#) Power Supply	(1) Constant Current 4200mA
# LEDss	96 white LED
Color Temperature	5000K
Input Watts	187.9
Delivered Lumens	22,862
Operating Life	60,000 hrs. (L70)
Fixture Efficacy	121.67 lm/W

#### **Polar Plot**



#### IES BUG ratings (backlight, uplight, glare) Per IES TM-15-11

SALM450U1		
Luminaire Classification System	Lumens	Luminaire %
FL (0-30 Degrees)	1658.5	9.3%
FM (30-60 Degrees)	5369.6	30.1%
FH (60-80 Degrees)	4682	26.2%
FVH (80-90 Degrees)	237.3	1.3%
BL (0-30 Degrees)	1252.8	7.0%
BM (30-60 Degrees)	2791.2	15.6%
BH (60-80 Degrees)	2785.8	10.0%
BVH (80-90 Degrees)	75.33	0.4%
UL (90-100 Degrees)	0.0	0.0%
UH (100-180 Degrees)	0.0	0.0%
Total	17,852.1	100.0%
BUG Rating	B3 U0 G3	



#### IES BUG ratings (backlight, uplight, glare) Per IES TM-15-11

SALL450U1		
<b>Luminaire Classification System</b>	Lumens	Luminaire %
FL (0-30 Degrees)	2210.4	9.7%
FM (30-60 Degrees)	6906.9	30.2%
FH (60-80 Degrees)	5542.9	24.2%
FVH (80-90 Degrees)	108.14	0.5%
BL (0-3 0 Degrees)	1710.9	7.5%
BM (30-60 Degrees)	3904.5	17.1%
BH (60-80 Degrees)	2432.1	10.6%
BVH (80-90 Degrees)	46.65	0.2%
UL (90-100 Degrees)	0.0	0.0%
UH (100-180 Degrees)	0.0	0.0%
Total	22,862.1	100%
BUG Rating	B3 U0 G3	

