



Catalog Number:

Project:

Comments:

Prepared By:

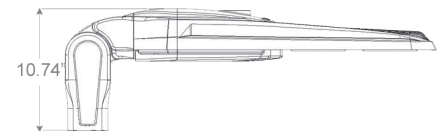
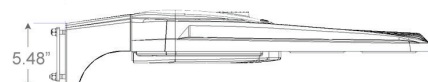
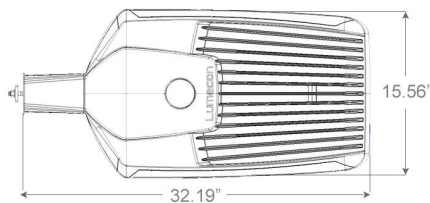
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Description

The sleek fixture design of the LDS-LAL is a blend of modern sophistication and unmatched energy efficiency. The LDS-LAL Large area light includes the benefits of superior thermal efficiency, an industry-leading ten-year all-parts warranty, and custom optics ensuring best-in-class photometric results. Optimize photometric designs with greater pole spacing, uniformity, and lower energy usage. The LDS-LAL includes lumen packages up to 50,000 lumens allowing one-for-one replacements of existing HID fixtures up to 1000 Watt, and is a perfect spec-grade solution for parking lots, pathways, tennis courts, and many other outdoor applications. Proudly Made in the USA.

Dimensions & Weights

Model	Width	Length	Height	Weight
LDS-LAL	15.56"	32.19"	5.48" (MAS) 10.74" (SF)	34.5 lbs



Technical Specifications

Input Voltage: 120-277V or 347-480V.

Housing: Die-cast aluminum housing with 60% gloss polyester powder coat finishes for maximum durability. The base aluminum material is prepared using an environmentally-friendly non-chrome 2-step surface cleaning and passivation process. The process results in a more durable conversion layer than traditional chromate conversion coatings and allows maximum adhesion of the powder coating to the aluminum substrate. Housing features an integrated heat sink and driver compartment built into the fixture design.

Mounting: Mounting arm designed for a square pole (standard). Additional mounting options include a pole mounting arm adaptor.

Split Circuit: Standard except on the 165W model.

Effective Projected Area (EPA): 1.05 ft²

Color Temperature: 2200K, 2700K, 3000K, 4000K (standard), 5000K.

LED Lifetime: All LEDs are rated for a minimum of 100,000 hours of continuous operation at ambient outdoor temperatures from -40°F/-40°C to 115°F/46°C.

Color Rendering Index (CRI): 80

Dimming: 0-10V standard dimming capability.

Custom Optics: Lumecon meticulously engineered premium acrylic optical lenses to maximize the distribution and uniformity of light while minimizing cost. Our arrays distribute light at least 21% further and with 29% more uniformity than leading competitors. Lumecon custom lenses create a uniform, well-lit environment that mitigates illuminance "hot spots" and use less wattage than typical LED area lights.

Vandal Resistant: Our lens is also resistant to vandalism with a low compact design making the lens material dense and impact resistant. We build to withstand high abuse lighting environments.

Surge Protection: Thermally protected 40kV varistor type surge suppressor is included and meets ANSI C136.2-2015: Extreme Level. Also meets IEC61643-11 Class II / EN61643-11 Type 2, and US Dept of Energy MSSLC Model Spec for surge protection. The device is wired in series with the luminaire input power in order to interrupt power to the luminaire when consumed, protecting the LED power supply and circuit boards from additional electrical surges.

Lumecon ETD™ System: The enhanced thermal dissipation system engines are thermally bonded to provide maximum thermal dissipation to the exterior of the fixture to ensure long life. To protect the light engine panel from moisture and corrosion, the LED light engine panel is uniformly coated with a UV stabilized acrylic polymer resin that meets MIL and ASTM dielectric standards, UL, and IPC standards for flammability, moisture resistance and thermal shock.

Certification Data: ETL Listed to UL 1598, UL 8750 for Wet Locations. *Full compliance and test documentation is available for TM-21, LM-79, LM-80, ETL Listing to UL1598 and UL 8750. Salt Fog tested for 3,000 hours per ASTM B117-16 / ASTM D610-08. Ingress Protection: IP66 per ANSI/IEC 60529-2004. Passed 3G vibration @ 100K cycles, per ANSI C136.31-2018.

DesignLights Consortium® (DLC) Qualified Product: Unless noted, not all versions of this product may be DLC® qualified. For a complete list of Lumecon DLC® Qualified Products visit: www.designlights.org.

Dimulator Photo-Control: Maximize the cost-saving benefits of your outdoor LED light fixtures with the stand-alone Dimming solution. All Dimulators (except for CD and DIM 3 versions) have three selectable dimming levels (30%, 50%, 70%) with three different start times (10:00 pm, Midnight, or 2:00 am), which are selectable through the ten position selector switch located on the bottom of the base. All dimming schedules will return to full brightness at 5:00 am. The stand-alone unit is made to work with the ANSI C136.41 receptacle and will provide dimming of LED fixtures.

Manufacturing Origin: US Manufactured and Assembled.

BABA Compliant: Meets Build America, Buy America Act Included in the Infrastructure Investment and Jobs Act, Public Law Number 117-58, Title IX, Subtitle A, Part I – Buy America Sourcing Requirements, Sections 70911-70917 stating Manufactured in the U.S. The cost of components mined, produced, or manufactured in the U.S. is greater than 55 percent of the total cost of all manufactured product components.

Warranty: 10 Year L70 performance based warranty. For full warranty terms, please visit our website: www.lumecon.com

Ordering Information

LDS-LAL – Options / Ordering Example: LDS-LAL-200-DB-T5-1-40-MAS

Wattage	Color	Distribution	Voltage	Color Temperature	Mounting Methods
165 - 165 Watts	DB - Dark Bronze	T2 - Type II	1 - 120v-277v	22 - 2200K	MAS - Mounting Arm (Square Pole) ⁵ <i>For a Round pole, add UARP option</i>
200 - 200 Watts	WH - White	T3 - Type III	2 - 347v-480v	27 - 2700K ⁵	SF - Slip Fitter
250 - 250 Watts	BK - Black	T4 - Type IV		30 - 3000K ⁵	TM - Tenon Mount ⁵
275 - 275 Watts	GR - Gray	T5 - Type V		40 - 4000K	
300 - 300 Watts	CC - Custom Color			50 - 5000K	
330 - 330 Watts	AF - Automotive Finish				

Options & Accessories

UARP - Universal Adaptor Round Pole

R - Receptacle Only

RS - Receptacle Only with Shorting Cap

7P - Seven-pin Twist Lock Photocell Receptacle Only ¹

PC1 - 120v-277v Button Eye Photocell ²

PC2 - 347v-480v Button Eye Photocell ²

PC3 - 120v-277v Twist Lock Photocell (10 year warranty)

PC4 - 347v-480v Twist Lock Photocell (10 year warranty)

OC1 - On/Off Occupancy Sensor ³

OC2 - Dim/High Occupancy Sensor ^{3,4}

OC3 - On/Off Occupancy Sensor w/Photocell ³

OC4 - Dim/High Occupancy Sensor w/Photocell ^{3,4}

SC - Split Circuit (Standard except on the 165W model)

DIM4 - 105-305 VAC, 50/60 Hz with 10 position field adjustable selector switch

DIM4-HV - High Voltage 312-530 VAC, 50/60 Hz with 10 position field adjustable selector switch

DIM4-CD - Constant all-night Dimming

DIM4-CD-HV - Constant all-night Dimming, 315-530 VAC 50/60Hz

DIM4-CUL - 120 VAC, 50/60 Hz, cUL certified version with gray cover

DIM4-ALC - Adaptive Lighting Control with 2% per year incremental increase to compensate for aging fixture

DIM3-XX - Factory set dimming schedule (10 position selector switch not available)

BS5 - Bird Spikes (Field Installed)

BL - Backlight Louver(s) snap over LED Array(s) for Backlight Control at the source.⁶

Accessories ordered as a separate line item:

33-00111 - External Glare Shield

33-00119 - Full Glare Shout

Notes:

- For units with 7P the mounting must be restricted to +/-45° from horizontal aim per ANSI C1136,10-2010. If more than a 45° Tilt, use PC1 or PC2
- Cannot be combined with Occupancy Sensor. Use OC3 or OC4 when Occupancy Sensor and Photocell are needed and aiming greater than 45° from horizontal.
- Must note on PO Mounting Height for proper lens application
- See Occupancy Sensor Default Settings Table
- 3000K or warmer, and fixed mounts must be ordered for IDA certification compliance
- Works with Type 2, Type 3 and Type 4 arrays.

Color Option Samples

Due to variations in monitor settings and color printing settings, colors will not be exact.



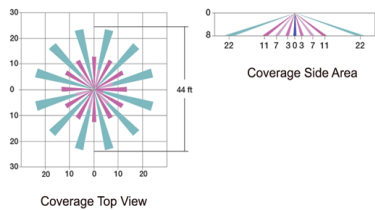
If OCC Sensor Option is selected, mounting height specifications need to be clarified:

If Mounting height and parameter settings not specified when ordered. Default mounting height is 10-40' lens and preset factory settings.

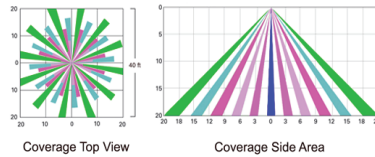
- ☐ Mounting height between 0' - 10'
- ☐ Mounting height between 10' - 20'
- ☐ Mounting height over 20' +

OCC Sensor Patterns

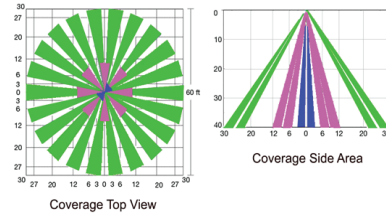
0' - 10' Mounting Height



10' - 40' Mounting Height



40' + Mounting Height



Occupancy Sensor Default Settings - Option OC2

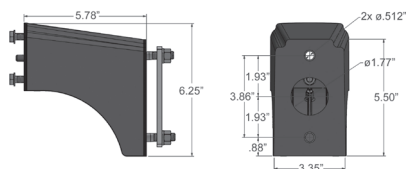
Option	Dimmed State (Unoccupied)	High Level (When occupied)	Photocell Operation (OC4 Option Only*)	Dwell Time (Occupancy time delay)	Ramp-up Time (From unoccupied to occupied)	Ramp-up Time (From occupied to unoccupied)
OC2 and OC4	Approx. 20% Output	100% Output	Enabled @ 1.5 FC*	5 Minutes	Disabled	Disabled

*Note: OC2 and OC4 settings including photocell set point, high/low dim rates, and occupancy sensor time delay are all configurable by using the Wattstopper® App. If any other settings are desired to be set at the factory, please note these changes on Purchase Order.

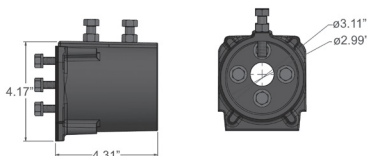
Performance Data

Model	Distribution Type	Watts	2200K					2700K					3000K					4000K					5000K				
			Lumens	B	U	G	Efficacy	Lumens	B	U	G	Efficacy	Lumens	B	U	G	Efficacy	Lumens	B	U	G	Efficacy	Lumens	B	U	G	Efficacy
LDS-LAL-165	Type 2	165W	20,701	3	0	3	127	23,796	3	0	3	146	25,492	3	0	3	156	26,496	3	0	3	162	26,496	3	0	3	162
	Type 3	165W	20,504	3	0	3	126	23,569	3	0	3	145	25,249	3	0	3	155	26,239	3	0	3	161	26,251	3	0	3	161
	Type 4	165W	19,794	3	0	4	123	23,174	3	0	4	144	24,923	3	0	4	154	26,118	3	0	4	160	26,127	3	0	4	160
	Type 5	165W	20,359	5	0	3	126	23,406	5	0	3	145	25,258	5	0	3	156	26,249	5	0	3	162	26,260	5	0	3	162
LDS-LAL-200	Type 2	200W	24,317	4	0	4	122	27,952	4	0	4	140	29,945	4	0	4	150	31,114	4	0	4	156	31,133	4	0	4	156
	Type 3	200W	24,137	4	0	4	121	27,745	4	0	4	139	29,723	4	0	4	149	30,883	4	0	4	155	30,902	4	0	4	155
	Type 4	200W	23,972	4	0	4	120	27,555	4	0	4	138	29,519	4	0	4	148	30,672	4	0	4	153	30,691	4	0	4	154
	Type 5	200W	24,257	5	0	4	121	27,883	5	0	4	140	29,871	5	0	4	149	31,035	5	0	4	155	31,056	5	0	4	155
LDS-LAL-250	Type 2	242W	28,741	4	0	4	119	33,037	4	0	4	136	35,392	4	0	4	146	36,773	4	0	4	152	36,796	4	0	4	152
	Type 3	242W	28,528	4	0	4	118	32,792	4	0	4	135	35,130	4	0	4	145	36,501	4	0	4	151	36,524	4	0	4	151
	Type 4	242W	28,333	4	0	4	117	32,569	4	0	4	134	34,889	4	0	4	144	36,251	4	0	4	150	36,274	4	0	4	150
	Type 5	242W	28,670	5	0	4	118	32,955	5	0	4	136	35,305	5	0	4	146	36,670	5	0	4	151	36,705	5	0	4	151
LDS-LAL-275	Type 2	276W	31,682	4	0	4	115	36,418	4	0	4	132	39,014	4	0	4	141	40,537	4	0	4	147	40,562	4	0	4	147
	Type 3	276W	31,447	4	0	4	114	36,147	4	0	4	131	38,725	4	0	4	140	40,236	4	0	4	146	40,261	4	0	4	146
	Type 4	276W	31,232	4	0	4	113	35,901	4	0	4	130	38,460	4	0	4	139	39,961	4	0	4	145	39,986	4	0	4	145
	Type 5	276W	31,604	5	0	4	115	36,329	5	0	4	132	38,917	5	0	4	141	40,443	5	0	4	147	40,462	5	0	4	147
LDS-LAL-300	Type 2	293W	33,128	4	0	4	113	38,080	4	0	4	130	40,794	4	0	4	139	42,386	4	0	4	145	42,413	4	0	4	145
	Type 3	293W	32,882	4	0	4	112	37,797	4	0	4	129	40,492	4	0	4	138	42,072	4	0	4	144	42,098	4	0	4	144
	Type 4	293W	32,657	4	0	4	112	37,539	4	0	4	128	40,215	4	0	4	137	41,785	4	0	4	143	41,810	4	0	4	143
	Type 5	293W	33,046	5	0	4	113	37,985	5	0	4	130	40,693	5	0	4	139	42,280	5	0	4	144	42,308	5	0	4	144
LDS-LAL-330	Type 2	332W	35,670	4	0	4	108	42,558	4	0	4	129	45,592	4	0	4	137	47,371	4	0	4	143	47,401	4	0	4	143
	Type 3	332W	34,708	4	0	4	105	41,410	4	0	4	125	43,668	4	0	4	132	46,089	4	0	4	139	46,126	4	0	4	139
	Type 4	330W	33,491	4	0	5	105	40,874	4	0	5	123	43,084	4	0	5	131	45,194	4	0	5	137	45,216	4	0	5	137
	Type 5	331W	33,538	5	0	5	107	42,453	5	0	5	128	44,697	5	0	5	135	47,051	5	0	5	143	47,180	5	0	5	142

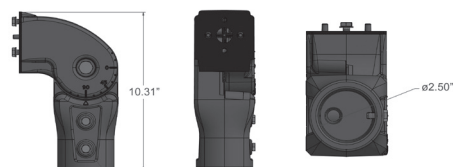
Mounting Method Dimensions



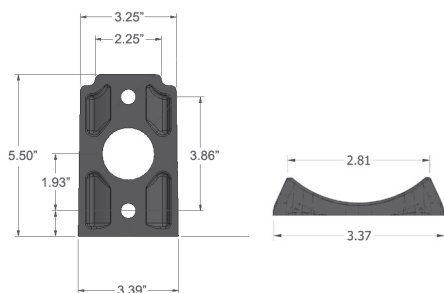
MAS - Square Pole Arm Dimensions



TM - Tenon Arm Dimensions

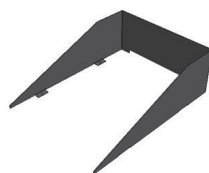
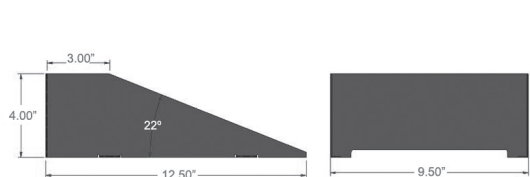


SF - Slip Fitter Arm Dimensions



UARP - Universal Adaptor Round Pole

External Glare Shield and Full Glare Snoot Dimensions



*Field Installed for Forward
Glare Reduction*



*Field Installed for Rear
Glare Reduction*

33-00111 - External Glare Shield



33-00119 - Full Glare Snoot

Backlight Louver(s)



BL - Backlight Louver(s) snap over LED Array(s)
for Backlight Control at the source.
Works with Type 2, Type 3 and Type 4 arrays.

Performance Data

Electrical Load Data

Fixture Model	Drive Current (mA)	System Watts (W)	AC Current Load (A)				
			120V	208V	240V	277V	480V
LDS-LAL-165	1450	165	1.53	0.88	0.76	0.66	0.38
LDS-LAL-200	910	200	1.85	1.07	0.93	0.80	0.46
LDS-LAL-250	1100	250	2.31	1.34	1.16	1.00	0.58
LDS-LAL-275	1250	275	2.55	1.47	1.27	1.10	0.64
LDS-LAL-300	1325	300	2.78	1.60	1.39	1.20	0.69
LDS-LAL-330	1475	330	3.06	1.76	1.53	1.32	0.76

Lumen Maintenance

Data in the table below references projected performance in a 25°C ambient and is based on 10,000 hours of LED testing. Performance data has been tested per IESNA LM-80-08 and projected per IESNA TM-21-11.

Use the lumen maintenance factor that corresponds to the desired number of operating hours below to calculate LLF.

Fixture Model	Lumen Maintenance Factors @ 25°C, by hours:				
	0	25,000	50,000	70,000	100,000
LDS-LAL-165	1.0	0.99	0.994	0.989	0.983
LDS-LAL-200	1.0	0.99	0.994	0.989	0.983
LDS-LAL-250	1.0	0.99	0.994	0.989	0.983
LDS-LAL-275	1.0	0.99	0.994	0.989	0.983
LDS-LAL-300	1.0	0.99	0.994	0.989	0.983
LDS-LAL-330	1.0	0.99	0.994	0.989	0.983