

## FEATURES & SPECIFICATIONS

**INTENDED USE** — Built on the compact, low-profile Z strip channel, this LED strip offers long maintenance-free life, several color temperatures, lumen outputs and lengths. Ideal for new construction and retrofit applications in T8 lengths. Ideal for use in commercial, retail, manufacturing, warehouse, and display applications. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate.** [Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.](#)

**CONSTRUCTION** — Compact-design channel and cover are formed from code-gauge cold-rolled steel. Easy to install six-point row aligner included for continuous row mounting.

**Finish:** Paint options include high-gloss, baked white enamel (WH), or matte black (MB). After fabrication, five-stage iron phosphate pre-treatment ensures superior paint adhesion and rust resistance.

**OPTICS** — Standard diffuse snap on/snap off lens eliminates pixels, improves uniformity and minimizes glare.

**ELECTRICAL** — Utilizes high-output LEDs integrated on a two-layer circuit board, ensuring cool-running operation. Optional internal pluggable wiring harness for reduced labor cost in row mounting applications (see PLR\_ordering information on page 5). Electronic LED driver is rated for 75 input watts maximum (see Operational Data on page 4 for actual wattage consumption), **multi-volt input and 0-10V dimming standard.** This fixture is designed to withstand a maximum line surge of 2.5kV at 0.75kA combination wave for indoor locations, for applications requiring higher level of protection additional surge protection must be provided.

LEDs provide 80CRI or 90 CRI at 3000 K, 3500 K, 4000 K or 5000 K.

Lumen output up to 1,500 lumens per foot. Luminaire should be installed in applications where ambient temperatures do not exceed 86°F (30°C).

**INSTALLATION** — Fixture may be surface mounted (with or without ZSPRG hanger), pendant or stem mounted with appropriate mounting options. Six-point aligner locks in place for easy continuous row mounting.

**LISTINGS** — CSA certified to US and Canadian safety standards. For use in damp locations between -40°F (-40°C) and 86°F (30°C).

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

**GOVERNMENT PROCUREMENT** — BAA — Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations. BABA — Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act. Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

**WARRANTY** — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

Catalog Number
Notes
Type



LED Striplight

# ZL1D

24", 48" and 96" Lengths



### A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® or control networks marked by a shaded background\*

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

\*See ordering tree for details

ZL1D LED Striplight

A+ Capable options indicated by this color background.

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative.

Example: ZL1D L48 3000LM FST MVOLT 40K 80CRI WH

Series	Length	Reflectors†	Nominal lumens†	Diffuser	Voltage	Color temperature	Color rendering index
ZL1D LED striplight	L24 24" †	(blank) Less reflector SMR Symmetric	1500LM 1,500 lumens 2500LM 2,500 lumens 3500LM 3,500 lumens	FST Drop lens	MVOLT 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V † 480 480V †	27K 2700 K 30K 3000 K 35K 3500 K 40K 4000 K 50K 5000 K	80CRI 80 CRI 90CRI 90 CRI
	L48 48"	(blank) Less reflector ASR Asymmetric SMR Symmetric	3000LM 3,000 lumens 5000LM 5,000 lumens 7000LM 7,000 lumens				
TZL1D LED striplight †	L96 96"	(blank) Less reflector SMR Symmetric	6000LM 6,000 lumens 10000LM 10,000 lumens 14000LM 14,000 lumens				

Options		Paint finish	
PLR___	Plug-in wiring‡	<b>Individual Controls ‡</b>  LBOZU 360° low mount LSXR PIR sensor, (7-15' mounting heights), ON/OFF occupancy, pre-wired (LINK) ‡  LBH0SZU 360° low mount LSXR PIR sensor, (7-15' mounting heights), high/low occupancy dimming, pre-wired (LINK) ‡  LBPZU 360° low mount LSXR PIR sensor, (7-15' mounting heights), ON/OFF photocell, pre-wired (LINK) ‡  LBM0SZU 360° low mount LSXR PIR sensor, (7-15' mounting heights), dimming and switching photocell, pre-wired (LINK) ‡  <b>Cord sets: ‡</b>  CS1W Cord with NEMA 5-15P, 120V straight blade plug, 18 gauge, 3 conductors, white, 6ft  CS3W Cord with NEMA L5-15P, 120V twist lock plug, 18 gauge, 3 conductors, white, 6ft  CS7W Cord with NEMA 7-15P, 277V straight blade plug, 18 gauge, 3 conductors, white, 6ft  CS11W Cord with NEMA L7-15P, 277V twist lock plug, 18 gauge, 3 conductors, white, 6ft  CS25W Cord with NEMA L24-20P, 347V twist lock plug, 18 gauge, 3 conductors, white, 6ft  CS97W Cord with NEMA L8-20P, 480V twist lock plug, 18 gauge, 3 conductors, white, 6ft  CS93W Cord only (no plug), 18 gauge, 3 conductors, white, 6ft	
PLR1LVG	Plug-in wiring-low voltage‡		
E7W	7W Emergency battery pack, constant power, Certified in CA Title 20 MAEDBS, User selectable Self-Diagnostic, AC Activate with Integral Test Switch‡		
2E7W	(2) 7W Emergency battery pack, constant power, Certified in CA Title 20 MAEDBS, User selectable Self-Diagnostic, AC Activate with Integral Test Switch‡		
E10W	10W Emergency battery pack, constant power, Certified in CA Title 20 MAEDBS, User selectable Self-Diagnostic, AC Activate with Integral Test Switch‡		
2E10W	(2)10W Emergency battery pack, constant power, Certified in CA Title 20 MAEDBS, User selectable Self-Diagnostic, AC Activate with Integral Test Switch‡		
E15WLC	Emergency battery pack, 15W Linear Constant Power, Certified in CA Title 20 MAEDBS‡		
OUTEND	Cord set to exit endplate of fixture		
BAA	Buy America(n) Act and/or Build America Buy America Qualified		
<b>nLight® Wireless</b>			
NLTAIR2 RLSXR10	nLight® Air Generation 2 enabled, 360° low mount sensor, (7 to 15' heights) (LINK)		
NLTAIR2 RLSXR10EM	nLight® Air Generation 2 enabled, 360° low mount sensor, (7 to 15' heights),UL 924 Emergency Operation, via power interrupt detection (not available with battery pack) (LINK) ‡		

Accessories: Order as separate catalog number.			
HC36 M12	Hanger chain, 36" (1 pair)	ZLR L24 SYM UPL WH	24" symmetric reflector with uplight, white finish
ZACVH M100	Adjustable 10' aircraft cable with Y hanger (1 pair)	ZLR L24 SYM WH	24" symmetric reflector, white finish
ZLANGBKT	Luma-tilt™ angle bracket for shelf or ledge mounting only	ZLR L46 SYM UPL WH	46" symmetric reflector with uplight, white finish
SQ_	Swivel stem hanger (specify length in 2" increments up to 48")	ZLR L46 SYM WH	46" symmetric reflector, white finish
NPP16D	nLight® wired power/relay pack, 0-10VDC dimming output (LINK)	ZLR L48 ASY WH	48" asymmetric reflector, white finish
RPP20D	nLight® air Generation 2 enabled, power/relay pack, 0-10V dimming output (LINK)	ZLR L48 SYM UPL WH	48" symmetric reflector with uplight, white finish
LSXR	Sensor Switch® LSXR occupancy sensor (LINK)	ZLR L48 SYM WH	48" symmetric reflector, white finish
ZSPRG J2	Tong and T-grid hanger, for 15/16" T-grid (Order quantity required in multiples of 2)	ZLR L92 SYM UPL WH	92" symmetric reflector with uplight, white finish
WGZ24	24" wireguard, white †	ZLR L92 SYM WH	92" symmetric reflector, white finish
WGZ48	48" wireguard, white †	ZLR L96 SYM UPL WH	96" symmetric reflector with uplight, white finish
		ZLR L96 SYM WH	96" symmetric reflector, white finish
		UNIVERSAL REFL ALIGNER	Universal reflector aligners, quantity 1

# ZL1D LED Striplight

‡ Option Value Ordering Restrictions	
Option value	Restriction
2E7W	Utilizes (2) Power Sentry PS750L emergency drivers. MVOLT required. Available with L96 only. Not available with L24, L48, L96 6000LM or any cordset that includes a plug.
2E10W	Utilizes (2) Power Sentry PS1055LCP emergency drivers. MVOLT required. Available with L96 10,000LM or 14000LM only. Not available with L24, L48, L96 6000LM or any cordset that includes a plug.
347, 480	Utilizes step down transformer.
Cordsets	Must specify voltage when plug is included. CS93W available with MVOLT. Cordsets exit back of fixture unless OUTEND option is specified.
E7W	Utilizes Power Sentry PS750L emergency driver. MVOLT required. Not available with L24 or any cordset that includes a plug.
E10W	Utilizes Power Sentry PS1055LCP emergency driver. MVOLT required. Available with L48 or L96 only. Not available with L24 or any cordset that includes a plug.
E15WLC	Utilizes Power Sentry PS1555LCP emergency driver. MVOLT required. Available with L96 only. Not available with L24, L48 or any cordset that includes a plug.
Individual Controls	Available with MVOLT, 347 or 480 only. See ordering information on page 6 for more configurations. This sensor configuration is suitable for minimum ambient temperature of 14°F (-10°C). See page 6 for low temperature option providing -4°F (-20°C) minimum ambient. When choosing Sensor and PLR for same fixture, consult the factory. Sensors come prewired, they must be snapped into place at time of installation.
L24	Not available with 347V, 480V or Batteries
nLight® Wireless	See (LINK) in sensor description to RLSXR specification sheet for more configurations. When choosing a sensor and PLR for same fixture, consult the factory. Sensors come prewired, they must be snapped into place at time of installation.
NLTAIR2 RLSXR10EM	MVOLT only.
Nominal Lumens	See Operational Data on page 4 for actual lumens.
PLR __	Not available with cordset options. See ordering information on page 5. When choosing a sensor and PLR for the same fixture, consult the factory.
PLR1LVG	Not available with cordset options.
Reflectors	Optional. Reflectors ship separately.
TZL1D	Tandem fixture comes as two L48 fixtures
WGZ24	Not available with ASR or SMR reflector options.
WGZ48	Not available with ASR or SMR reflector options. Order a Qty of 2 for L96 tandem fixtures.

ZL1D LED Striplight

OPERATIONAL DATA

	Nominal lumen package	Length (inches)	Delivered Lumens 3000K CCT @ 77°F (25°C) ambient temperature		Delivered Lumens 3500K CCT @ 77°F (25°C) ambient temperature		Delivered Lumens 4000K CCT @ 77°F (25°C) ambient temperature		Delivered Lumens 5000K CCT @ 77°F (25°C) ambient temperature		Wattage @ 120V/277V	Comparable Light Source
			80 CRI	90 CRI	80 CRI	90 CRI	80 CRI	90 CRI	80 CRI	90 CRI		
Lensed	1500LM	24	1985	1619	2030	1675	2061	1707	2137	1745	17	1-lamp 17W T8
	2500LM	24	2682	2187	2742	2264	2785	2307	2887	2358	22	1-lamp 17W T8
	3500LM	24	4099	3341	4190	3459	4255	3524	4412	3603	36	1-lamp 32W T8, 1-lamp 54W T5H0, 50W HID
	3000LM	48	3880	3163	3966	3274	4028	3336	4176	3410	30	1-lamp 32W T8, 1-lamp 54W T5H0, 50W HID
	5000LM	48	5337	4351	5456	4504	5541	4589	5745	4691	41	2-lamp 32W T8, 1-lamp 54W T5H0, 70W HID
	7000LM	48	7317	5965	7480	6175	7596	6291	7876	6431	59	3-lamp 32W T8, 2-lamp 54W T5H0, 100W HID
	6000LM	96	8077	6585	8257	6816	8386	6945	8694	7099	60	3-lamp 32W T8, 2-lamp 54W T5H0, 100W HID
	10000LM	96	11021	8985	11267	9301	11442	9477	11864	9687	81	4-lamp 32W T8, 2-lamp 54W T5H0, 100W HID
	14000LM	96	15397	12553	15741	12995	15986	13240	16574	13534	121	4-lamp 32W T8, 3-lamp 54W T5H0, 150W HID

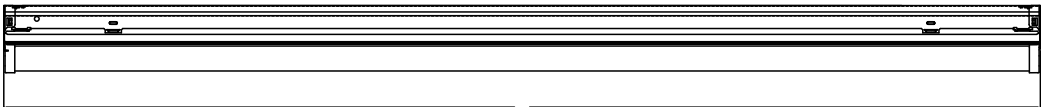
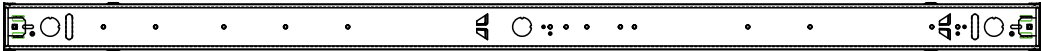
PROJECTED LUMEN MAINTENANCE

Operating Hours	0	15,000	30,000	45,000	60,000	100,000
Lumen Maintenance Factor	1	0.94	0.89	0.83	0.79	0.67

DIMENSIONS

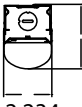
All dimensions are shown in inches (centimeters) unless otherwise noted.  
Specifications subject to change without notice.

PALLET DIMENSIONS			
Length	Approximate weight	Fixtures per pallet	Approximate pallet dimensions (L x W x H)
L24	7 lbs.	176	46" X 51" X 31 5/8"
L48	13 lbs.	176	46" X 51" X 31 5/8"
L96	26 lbs.	63	46" X 98 1/2" X 31 3/8"



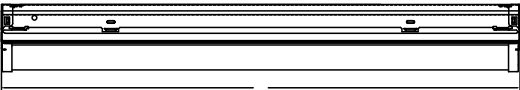
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ZL1D L48



2.9882

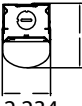
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24.028

ZL1D L24

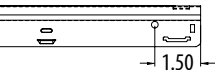
Knockout hole is .86in in diameter.



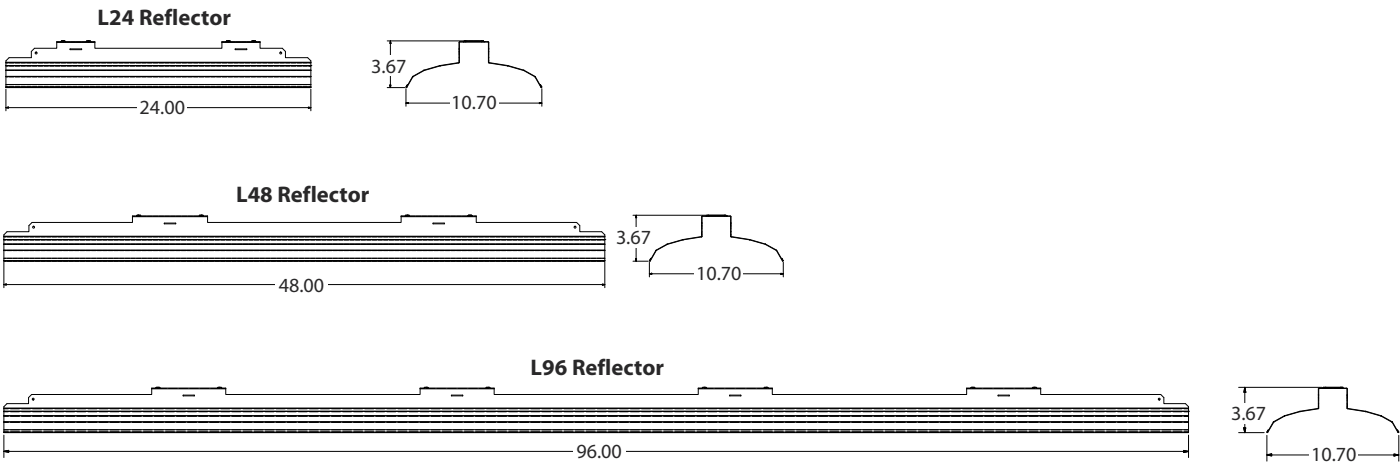
2.9882

2.234

Mounting Hole Location - All Lengths



REFLECTORS (Optional)



PHOTOMETRICS

Please see [www.lithonia.com](http://www.lithonia.com)

PLUG-IN WIRING INFORMATION

Advanced plug-in system with two-circuit capability. Available on industrial and strip products and a variety of architectural products mounted in continuous rows. PLR22 (2-circuit) and crossover harness switches hot circuit serving next fixture in row. Reduces fixture types on job for alternating circuit applications (see example below.)

Easy one-step installation, saves up to 35% on labor costs. Expanded switching flexibility helps save energy.

Rows can be 50% longer with two-circuit systems. Polarized, lock-together nylon connectors prevent miswiring in the field. #12 THHN conductor, rated 600V, 90°C. White neutral wire included. Grounding accomplished by fixture in-row connectors.

CSA certified systems available with up to 2 circuits. G ground required.

Not for use with dedicated emergency circuits.

Note: Specifications subject to change without notice.



Wiring  
**PLR**

Advanced 1 or 2-Circuit Plug-In

ORDERING INFORMATION      Lead times will vary depending on options selected. Consult with your sales representative.

Series	Number of hot wires		Branch circuits		Dimming	Ground
PLR	(blank)	Not required for PLR22	<u>Circuits to which driver is connected</u>	<u>Battery charging circuit (must be unswitched)</u>	LV    Low-voltage dimming	G    Ground (required)
PLR22	1	Black	(blank)    Not required for PLR22 or PLR1	(blank)    No battery charging circuit		
	2	Black and red	A    Black wire	ELA    Battery pack circuit wired to black wire		
			B    Red wire	ELB    Battery pack circuit wired to red wire		

Typical Applications

- Multiple-circuit and single-circuit for longer continuous rows
- Multiple-circuit with alternating fixtures on separate circuits and 2-circuit PLR22
- Multiple circuit with night-lights located along row as desired

ZL1D LED Striplight

LSXR — Fixture Mount Occupancy Sensor (see [www.AcuityControls.com](http://www.AcuityControls.com) for additional information)

- Three interchangeable lens options to satisfy multiple mounting heights and coverage pattern requirements.
- Integrated mounting bracket drops lens down 3" from chase nipple.
- Single or dual relay versions — designed with robust protection from the harsh switching requirements of T5 and LED loads.
- Photocell and 0-10VDC dimming options.
- No PIR field calibration or sensitivity adjustments required.
- Sensor ambient temperature rating of 14°F (-10°C) to 131°F (55°C).

LSXR configuration	Comparable CMRB sensor	Old style sensor nomenclature
For shortest lead times use one of the following LSXR configurations		
LCOZU	CMRB 50	MSI
LCHOSZU	CMRB 50 D	MSID
LCPZU	CMRB 50 P	MSIPED
LAOZU	CMRB 6	MSI360
LAHOSZU	CMRB 6 D	MSI360D
LAPZU	CMRB 6 P	MSI360PED

SELECTIONS BELOW WILL EXTEND ORDER LEAD TIME. CONSULT YOUR SALES REPRESENTATIVE FOR DETAILS.

SINGLE RELAY

ORDERING INFORMATION

Example: LAHOSZU

Series	Lens option	Dimming/Photocell	Max. dim level	Min. dim level	Temp/Humidity	Default occupancy time delay
L LSXR passive infrared indoor occupancy sensor	A High mount, 360°	O None <sup>1</sup>	0 10 VDC	S Minimum dim level of ballast	Z None	I 30 sec
		H High/low occupancy operation	9 9 VDC		T Low temperature <sup>2</sup>	D 2.5 min
	B Low mount, 360°	P Switching photocell (on/off) <sup>1</sup>	8 8 VDC	1 1 VDC		X 5.0 min
			7 7 VDC	2 2 VDC		R 7.5 min
	C High mount aisleway	M Dimming and switching photocell		3 3 VDC		U 10.0 min (with minimum 15 minute on time)
		G Dimming and switching photocell with high/low occupancy operation		4 4 VDC		V 15.0 min
				5 5 VDC		W 20.0 min
				6 6 VDC		Y 30.0 min

- Notes
- 1 Max and min dim levels not applicable with this option.
  - 2 Ambient temperature rating of -4°F (-20°C) to 131°F (55°C).

DUAL RELAY (Available with 120, 277, and 347V only)

ORDERING INFORMATION

Example: LA2KZU

Series	Lens option	Poles	Operating mode	Temp/Humidity	Default occupancy time delay
L LSXR passive infrared indoor occupancy sensor	A High mount, 360°	2 Dual relay	J None	Z None	I 30 sec
	B Low mount, 360°		K Alternating off relays (promotes even lamp wear)	T Low temperature¹	D 2.5 min
	C High mount aisleway		O Alternating off relays w/photocell		X 5.0 min
			P Switching photocell(on/off)		R 7.5 min
			E Photocell on/off (pole 1 only)		U 10.0 min (with minimum 15 minute on time)
			F Photocell on/off - both poles (dual set-point)		V 15.0 min
					W 20.0 min
		Y 30.0 min			

- Notes
- 1 Ambient temperature rating of -4°F (-20°C) to 131°F (55°C).

Example: LENS 50 J100

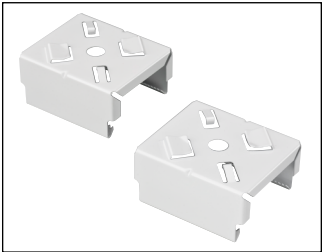
Replacement lenses: Order as separate catalog number.		
Series	Lens type	Package quantity
LENS	6 High mount 360°	[blank] Single Lens
	10 Low mount 360°	J10 10-pack
	50 High mount aisleway	J100 100-pack

OPTIONS AND ACCESSORIES

The Z Series fixture offers numerous options for almost every electrical and optical component, including a long list of field-installable accessories.



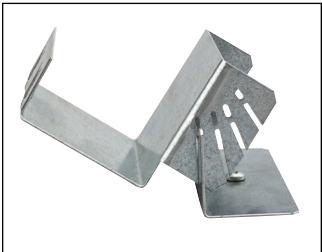
**HANGER CHAIN**  
36" chain with Y hanger.  
  
Order as:  
HC36



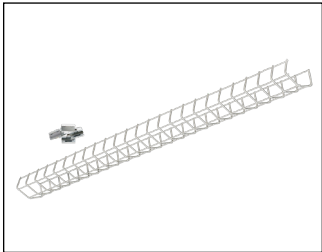
**Z SPRING HANGER**  
Snap 'n' lock design requires no fasteners and can be used on T-grid ceiling or universal mounting systems.  
  
Order as:  
ZSPRG



**ZACVH HANGER**  
10' Aircraft cable with Y hanger.  
  
Order as:  
ZACVH



**ANGLE MOUNTING BRACKET**  
Luma-tilt™ angle bracket ships as a pair  
  
Order as:  
ZLANGBKT



**WIRE GUARD**  
  
Order as:  
WGZ24  
WGZ48