

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 3). Electronic LED driver is rated for 75 input watts maximum (see Operational Data on page two 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 to confirm which versions are qualified.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: 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 XPoint™ Wireless control networks marked by a shaded background*

To learn more about A+, visit 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 ³	Nominal lumens ⁴	Diffuser	Voltage	Color temperature	Color rendering index
ZL1D LED striplight	L24 24" ²	(blank) Less reflector	1500LM 1,500 lumens	FST Drop lens	MVOLT 120-277V	30K 3000 K	80CRI 80 CRI
		SMR Symmetric	2500LM 2,500 lumens		120 120V	35K 3500 K	90CRI 90 CRI
			3500LM 3,500 lumens		208 208V	40K 4000 K	
ZL1D LED striplight ¹	L48 48"	(blank) Less reflector	3000LM 3,000 lumens		240 240V	50K 5000 K	
		ASR Asymmetric	5000LM 5,000 lumens		277 277V		
		SMR Symmetric	7000LM 7,000 lumens		347 347V ⁵		
TZL1D LED striplight ¹	L96 96"	(blank) Less reflector	6000LM 6,000 lumens		480 480V ⁵		
		SMR Symmetric	10000LM 10,000 lumens				
			14000LM 14,000 lumens				

Options		Individual Controls ⁶	Paint finish
PLR__	Plug-in wiring ^{6,7}	LBOZU 360° low mount motion sensor, pre-wired ¹¹	WH White
PLR1LVG	Plug-in wiring-low voltage ^{6,7}	LBH0SZU 360° low mount motion sensor with dimming, pre-wired ¹¹	MB Matte black
E7W	Emergency battery pack, 7W CA Title 20 Noncompliant ⁸	LBPZU 360° low mount motion sensor with photocell, pre-wired ¹¹	GALVB Galvanized fixture with black plastic lens endcaps
2E7W	Two Emergency battery packs, 7W CA Title 20 Noncompliant ^{8,9}	LBM0SZU 360° low mount motion sensor, dimming & switching photocell, pre-wired ¹¹	GALVW Galvanized fixture with white plastic lens endcaps
E10WLCP	Emergency battery pack, 10W Linear Constant Power, Certified in CA Title 20 MAEDBS ^{8,9}	Cord sets: ¹²	
2E10WLCP	Two Emergency battery packs, 10W Linear Constant Power, Certified in CA Title 20 MAEDBS ^{8,9}	CS1W Straight plug, 120V	
E15WLCP	Emergency battery pack, 15W Linear Constant Power, Certified in CA Title 20 MAEDBS ^{8,9}	CS3W Twist-lock, 120V	
OUTEND	Cord set to exit endplate of fixture	CS7W Straight plug, 277V	
Wireless Controls⁶		CS11W Twist-lock, 277V	
NLTAIR2 RLSXR10	nLight Air Generation 2 Fixture mount, LSXR sensor low mount 360°	CS25W Twist-lock, 347V	
NLTAIR2 RLSXR10EM	nLight Air Generation 2 Fixture mount, LSXR sensor low mount 360°, UL924 Emergency operation ¹⁰	CS97W Twist-lock, 480V	
		CS93W 600V SE00W white cord, no plug (no voltage required)	

Accessories: Order as separate catalog number.			
HC36 M12	Hanger chain, 36" (1 pair)	ZLR L24 SYM WH	24" symmetric reflector, white finish
ZACVH M100	Adjustable 10' aircraft cable with Y hanger (1 pair)	ZLR L46 SYM UPL WH	46" symmetric reflector with uplight, white finish
ZLANGBKT	Luma-tilt™ angle bracket for shelf or ledge mounting only	ZLR L46 SYM WH	46" symmetric reflector, white finish
SQ_	Swivel stem hanger (specify length in 2" increments up to 48")	ZLR L48 ASY WH	48" asymmetric reflector, white finish
NPP16D	nLight® switching/dimming module	ZLR L48 SYM UPL WH	48" symmetric reflector with uplight, white finish
rPP20D	nLight® Air switching/dimming module	ZLR L48 SYM WH	48" symmetric reflector, white finish
LSXR	Sensor Switch® LSXR occupancy sensor ⁵	ZLR L92 SYM UPL WH	92" symmetric reflector with uplight, white finish
ZSPRG J2	Tong and T-grid hanger, for 15/16" T-grid (1 pair)	ZLR L92 SYM WH	92" symmetric reflector, white finish
WGZ24	24" wireguard, white ¹³	ZLR L96 SYM UPL WH	96" symmetric reflector with uplight, white finish
WGZ48	48" wireguard, white ^{13,14}	ZLR L96 SYM WH	96" symmetric reflector, white finish
ZLR L24 SYM UPL WH	24" symmetric reflector with uplight, white finish	UNIVERSAL REFL ALIGNER	Universal reflector aligners, quantity 1

Notes

- Tandem fixture comes as two L46 or L48 fixtures
- Not available with 347V, 480V or Batteries
- Optional. Reflectors ship separately.
- See Operational Data on page 2 for actual lumens.
- Utilizes step down transformer.
- See ordering information on pages 4 and 5 and [rLSXR specification sheet](#) for more configurations. When choosing Sensor and PLR for same fixture, consult the factory.
- Not available with cord sets.
- MVOLT only. Not available with cord sets with plugs. Battery Spec sheet linked for more information.
- Only available with 10,000LM and 14,000LM packages.
- MVOLT only.
- Available with MVOLT, 347V and 480V only. 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. Sensors come prewired, they must be snapped into place at time of installation.
- Cordsets exit back of fixture unless OUTEND option is specified. Must specify voltage (not required when ordering CS93W).
- Not compatible with reflector
- Order 2 for tandem double length fixtures (TZL1N).

ZL1D LED Striplight

OPERATIONAL DATA												
	Nominal lumen package	Length (inches)	Delivered Lumens 3000 K CCT @ 77°F (25°C) ambient temperature		Delivered Lumens 3500 K CCT @ 77°F (25°C) ambient temperature		Delivered Lumens 4000 K CCT @ 77°F (25°C) ambient temperature		Delivered Lumens 5000 K 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 T5HO, 50W HID
	3000LM	48	3880	3163	3966	3274	4028	3336	4176	3410	30	1-lamp 32W T8, 1-lamp 54W T5HO, 50W HID
	5000LM	48	5337	4351	5456	4504	5541	4589	5745	4691	41	2-lamp 32W T8, 1-lamp 54W T5HO, 70W HID
	7000LM	48	7317	5965	7480	6175	7596	6291	7876	6431	59	3-lamp 32W T8, 2-lamp 54W T5HO, 100W HID
	6000LM	96	8077	6585	8257	6816	8386	6945	8694	7099	60	3-lamp 32W T8, 2-lamp 54W T5HO, 100W HID
	10000LM	96	11021	8985	11267	9301	11442	9477	11864	9687	81	4-lamp 32W T8, 2-lamp 54W T5HO, 100W HID
	14000LM	96	15397	12553	15741	12995	15986	13240	16574	13534	121	4-lamp 32W T8, 3-lamp 54W T5HO, 150W HID

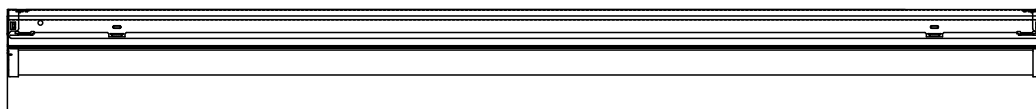
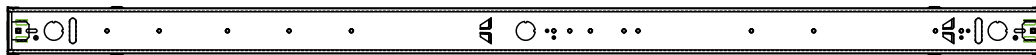
PROJECTED LUMEN MAINTENANCE

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

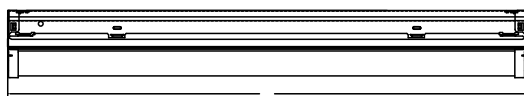
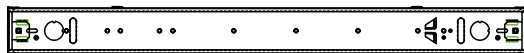
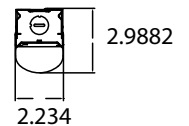
All dimensions are shown in inches (centimeters) unless otherwise noted.
Specifications subject to change without notice.

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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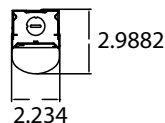
ZL1D L48



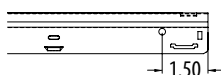
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ZL1D L24

Knockout hole is .86in in diameter.

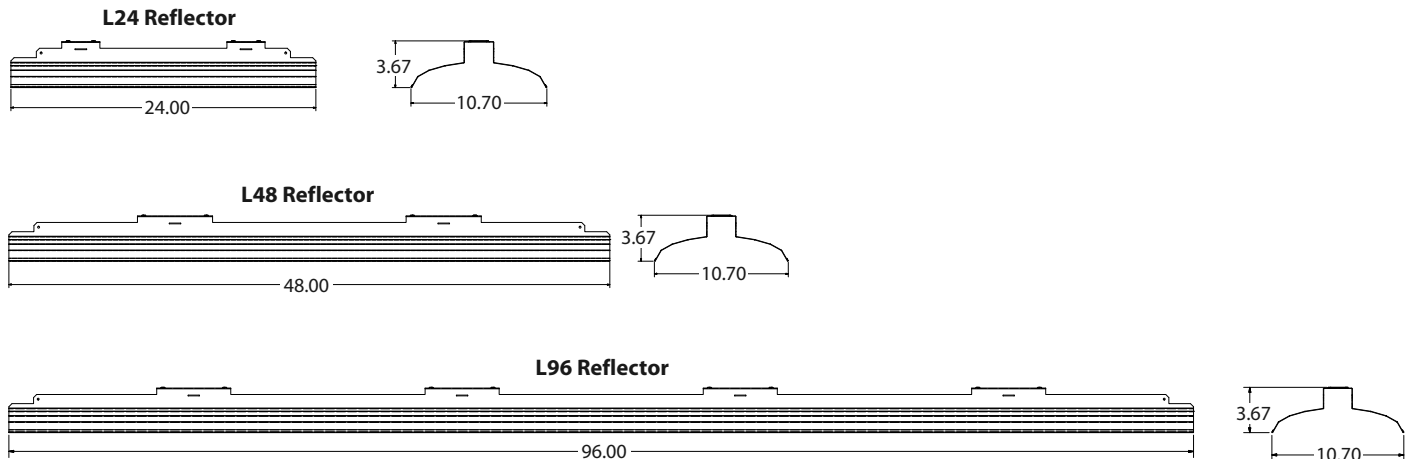


Mounting Hole Location - All Lengths



ZL1D LED Striplight

REFLECTORS (Optional)



PHOTOMETRICS

Please see www.lithonia.com

PRODUCT 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. 1, 2, 3 and 4-lamp fixtures. 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.

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 22	<u>Circuits to which ballast is connected</u>	LV Low-voltage dimming	G Ground, required
PLR22	1 Black	(blank) Not required for 22 or PLR1		
	2 Black and red	A Black wire		
		B Red wire		
		<u>Emergency circuit connected</u>		
		(blank) No emergency circuit		
		ELA Emergency circuit wired to black wire		
		ELB Emergency 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 (PLR 22)
- Multiple circuit with night-lights located along row as desired

ZL1D LED Striplight

LSXR — Fixture Mount Occupancy Sensor (see 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
LCH0SZU	CMRB 50 D	MSID
LCPZU	CMRB 50 P	MSIPED
LAOZU	CMRB 6	MSI360
LAH0SZU	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: LAH0SZU

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 ¹	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 ²	D 2.5 min
	B Low mount, 360°	P Switching photocell (on/off) ¹	8 8 VDC		1 1 VDC	X 5.0 min
		M Dimming and switching photocell	7 7 VDC		2 2 VDC	R 7.5 min
					3 3 VDC	U 10.0 min (with minimum 15 minute on time)
	C High mount aisleway	G Dimming and switching photocell with high/low occupancy operation	4 4 VDC		5 5 VDC	V 15.0 min
			6 6 VDC		6 6 VDC	W 20.0 min
				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° B Low mount, 360° C High mount aisleway	2 Dual relay	J None	Z None	I 30 sec
			K Alternating off relays (promotes even lamp wear)	T Low temperature ¹	D 2.5 min
			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

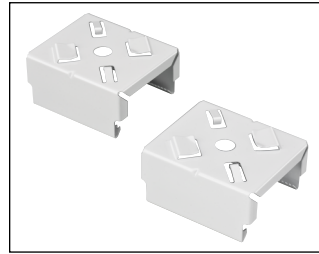
The Z Series fixture offers numerous options for almost every electrical and optical component, including a long list of field-installable accessories.



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.

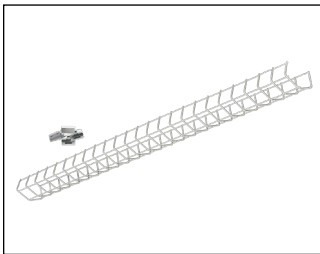
Order as:
ZACVH



ANGLE MOUNTING BRACKET

Luma-tilt™ angle bracket ships as a pair

Order as:
ZLANGBKT



WIRE GUARD

Order as:
WGZ24
WGZ48