LITHONIA LIGHTING®

Catalog Number
Notes
Type

LED Striplight

Z SERIES

ZL1D

24", 48" and 96" Lengths

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/customer-support/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.

⊂SA⁺ 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.

Series		Length		Reflectors[2]		Nominal lumens[3]		Diffuser		Voltage		Color temperature		Color rendering index	
ZL1D	LED striplight	L24	24" [1]	(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		
		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 [4]				
TZL1D	LED striplight	L96	96"	(blank)	Less reflector	6000LM	6,000 lumens			480	480V [4]				
				SMR	Symmetric	10000LM	10,000 lumens								
						14000LM	14,000 lumens								

Options

PLR__	Plug-in wiring[5,6]
PLR1LVG	Plug-in wiring-low voltage[5,6]
E7W	Emergency battery pack, 7W CA Title 20 Noncompliant[7]
2E7W	Two Emergency battery packs, 7W CA Title 20 Noncompliant[7,8]
E10WLCP	Emergency battery pack, 10W Linear Constant Power, Certified in CA Title 20 MAEDBS[7]
2E10WLCP	Two Emergency battery packs, 10W Linear Constant Power, Certified in CA Title 20 MAEDBS[7,8]
E15WLCP	Emergency battery pack, 15W Linear Constant Power, Certified in CA Title 20 MAEDBS[7,8]
OUTEND	Cord set to exit endplate of fixture

Wireless Controls [5]

NLTAIR2 RLSXR10	nLight Air Generation 2 Fixture mount, LSXR sensor low mount 360˚
NLTAIR2 RLSXR10EM	nLight Air Generation 2 Fixture mount, LSXR sensor low mount 360˚, UL924 Emergency operation [9]

Individual Controls [5]

LBOZU	360° low mount motion sensor, pre-wired [10]
LBH0SZU	360° low mount motion sensor with dimming, pre-wired [10]
LBPZU	360° low mount motion sensor with photocell, pre-wired [10]
LBM0SZU	360° low mount motion sensor, dimming & switching photocell, pre-wired [10]

Cord sets: [11]

CS1W	Straight plug, 120V
CS3W	Twist-lock, 120V
CS7W	Straight plug, 277V
CS11W	Twist-lock, 277V
CS25W	Twist-lock, 347V
CS97W	Twist-lock, 480V
CS93W	600V SEOOW white cord, no plug (no voltage required)

Paint finish

WH	White
MB	Matte black
GALVB	Galvanized fixture with black plastic lens endcaps
GALVW	Galvanized fixture with white plastic lens endcaps

Accessories: *Order as separate catalog number.*

HC36	Hanger chain, 36"	ZLR L24 SYM WH	24" symmetric reflector, white finish
ZACVH	Aircraft cable 10' (one 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_	Stem kit, 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		
LSXR	Sensor Switch® LSXR occupancy sensor [4]	ZLR L48 SYM WH	48" symmetric reflector, white finish
ZSPRG	For 15/16" T-grid only	ZLR L92 SYM UPL WH	92" symmetric reflector with uplight, white finish
WGZ24	24" wireguard, white [12]	ZLR L92 SYM WH	92" symmetric reflector, white finish
WGZ48	48" wireguard, white [12,13]	ZLR L96 SYM UPL WH	96" symmetric reflector with uplight, white finish
ZLR L24 SYM UPL WH	24" symmetric reflector with uplight, white finish	ZLR L96 SYM WH	96" symmetric reflector, white finish
		UNIVERSAL REFL ALIGNER	Universal reflector aligners, quantity 1

Notes

1. Not available with 347V, 480V or Batteries
2. Optional. Reflectors ship separately.
3. See Operational Data on page 2 for actual lumens.
4. Utilizes step down transformer.
5. 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.
6. Not available with cord sets.
7. MVOLT only. Not available with cord sets with plugs. Battery Spec sheet linked for more information.
8. Only available with 10,000LM and 14,000LM packages.
9. MVOLT only.
10. 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.
11. Cordsets exit back of fixture unless OUTEND option is specified. Must specify voltage (not required when ordering CS93W).
12. Not compatible with reflector
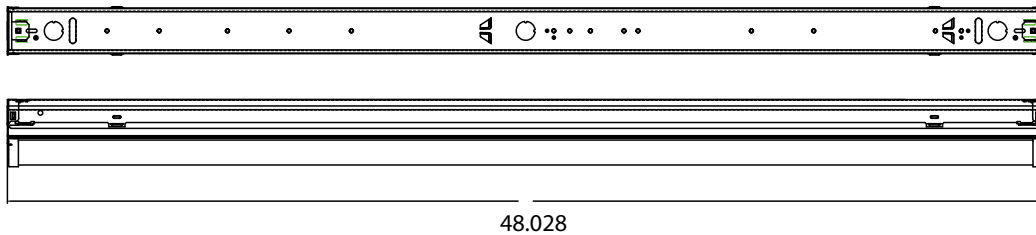13. Order 2 for tandem double length fixtures (TZL1N).

ZL1D LED Striplight

OPERATIONAL DATA

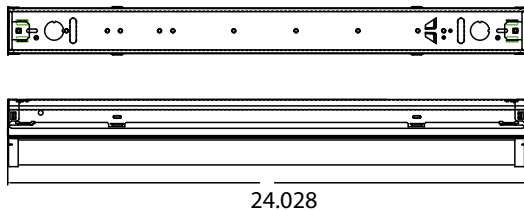| Nominal lumen package	Length (inches)	Delivered Lumens 3000 K CCT @ 77°F (25°C) ambient temperature		Delivered Lumens 3500 K CCT @ 77°F (25°C) ambient temperature		Delivered Lumens 4000 K CCT @ 77°F (25°C) ambient temperature		Delivered Lumens 5000 K CCT @ 77°F (25°C) ambient temperature		Wattage @ 120V/277V	Comparable Light Source
		80 CRI	90 CRI	80 CRI	90 CRI	80 CRI	90 CRI	80 CRI	90 CRI		
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

(Lensed)

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"

48.028

2.9882

2.234

ZL1D L48

24.028

ZL1D L24

Knockout hole is .86in in diameter.

2.9882

2.234

Mounting Hole Location - All Lengths

1.50

REFLECTORS (Optional)

L24 Reflector

24.00 3.67 10.70

L48 Reflector

48.00 3.67 10.70

L96 Reflector

96.00 3.67 10.70
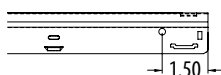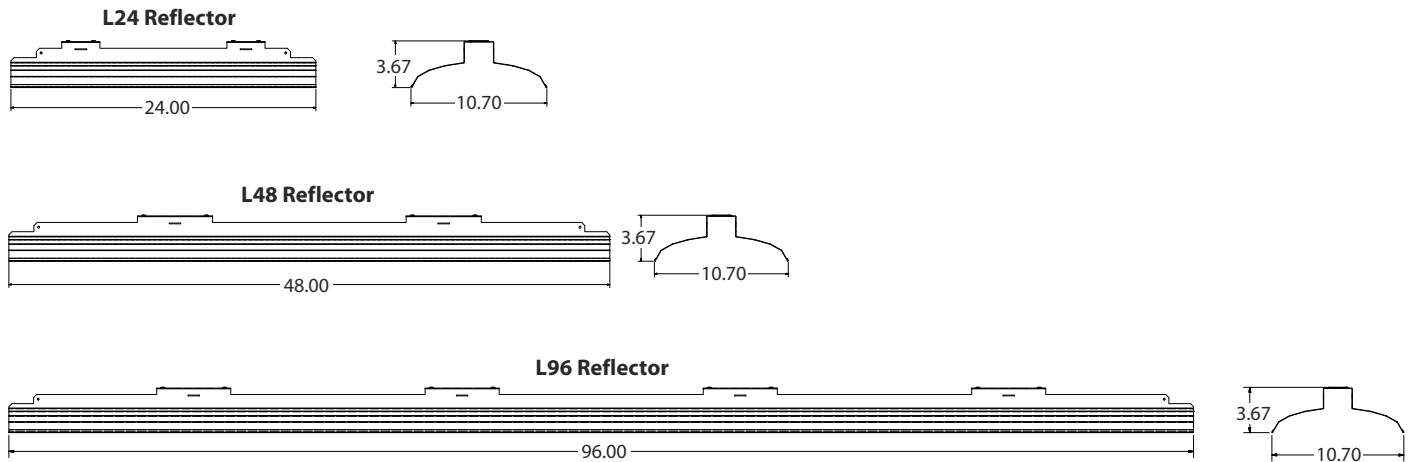
PHOTOMETRICS

Please see www.lithonia.com

PRODUCT INFORMATION

Wiring

PLR

Advanced 1 or 2-Circuit Plug-In

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.

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	Circuits to which ballast is connected		Emergency circuit connected		LV	Low-voltage dimming	G	Ground, required
PLR22	1	Black	(blank)	Not required for 22 or PLR1	(blank)	No emergency circuit				
	2	Black and red	A	Black wire	ELA	Emergency circuit wired to black wire				
			B	Red 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

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° B Low mount, 360° C High mount aisleway	O None[1] H High/low occupancy operation P Switching photocell (on/off)[1] M Dimming and switching photocell G Dimming and switching photocell with high/low occupancy operation	0 10 VDC 9 9 VDC 8 8 VDC 7 7 VDC	S Minimum dim level of ballast 1 1 VDC 2 2 VDC 3 3 VDC 4 4 VDC 5 5 VDC 6 6 VDC	Z None T Low temperature[2]	I 30 sec D 2.5 min X 5.0 min R 7.5 min U 10.0 min (with minimum 15 minute on time) V 15.0 min 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 K Alternating off relays (promotes even lamp wear) O Alternating off relays w/photocell P Switching photocell(on/off) E Photocell on/off (pole 1 only) F Photocell on/off - both poles (dual set-point)	Z None T Low temperature[1]	I 30 sec D 2.5 min X 5.0 min R 7.5 min U 10.0 min (with minimum 15 minute on time) 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° 10 Low mount 360° 50 High mount aisleway	[blank] Single Lens J10 10-pack 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.
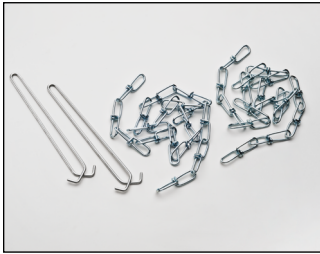
HANGER CHAIN

36" chain with Y hanger.

Order as:

HC36
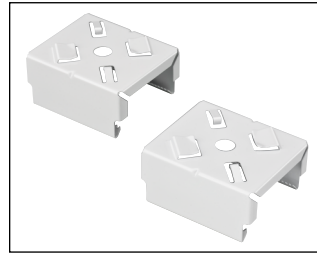
Z SPRING HANGER

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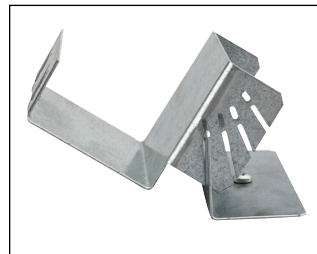
Order as:

ZSPRG

ZACVH HANGER
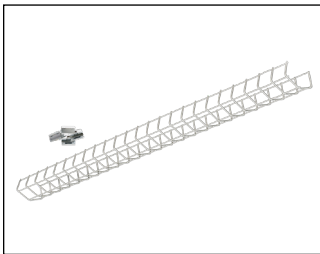
10' Aircraft cable with Y hanger.

Order as:

ZACVH

ANGLE MOUNTING BRACKET

Luma-tilt™ angle bracket ships as a pair

Order as:

ZLANGBKT

WIRE GUARD

Order as:
WGZ24
WGZ48

LITHONIA LIGHTING®