LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

Z SERIES

LED Striplight

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 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 to confirm which versions are qualified.

BUY AMERICAN ACT — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to 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

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.

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.

*See ordering tree for details

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

PLR__	Plug-in wiring‡
PLR1LVG	Plug-in wiring-low voltage‡
E7W	Emergency battery pack, 7W CA Title 20 Noncompliant‡
2E7W	Two Emergency battery packs, 7W CA Title 20 Noncompliant‡
E10WLCP	Emergency battery pack, 10W Linear Constant Power, Certified in CA Title 20 MAEDBS‡
2E10WLCP	Two Emergency battery packs, 10W Linear Constant Power, Certified in CA Title 20 MAEDBS‡
E15WLCP	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 Compliant
nLight® Wireless	
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) ‡

Individual Controls ‡

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) ‡

Cord sets: ‡

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

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

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‡ 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.
2E10WLCP	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.
E10WLCP	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.
E15WLCP	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.

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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

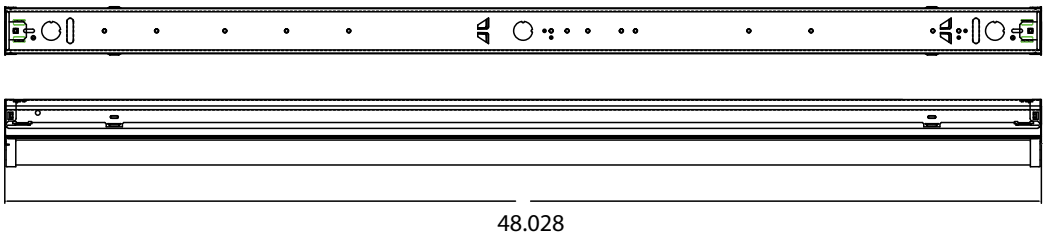
Operating Hours	0	15,000	30,000	45,000	60,000	100,000
Lumen Maintenance Factor	1	0.94	0.89	0.83	0.79	0.67

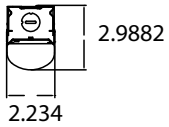
DIMENSIONS

All dimensions are shown in inches (centimeters) unless otherwise noted.

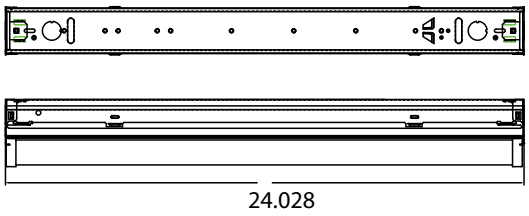
Specifications subject to change without notice.

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"

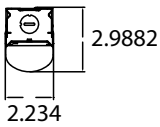




ZL1D L48

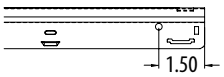


Knockout hole is .86in in diameter.



ZL1D L24

Mounting Hole Location - All Lengths



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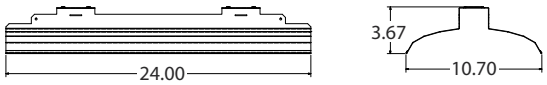
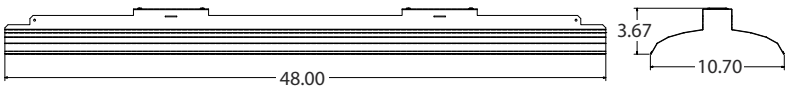
REFLECTORS (Optional)

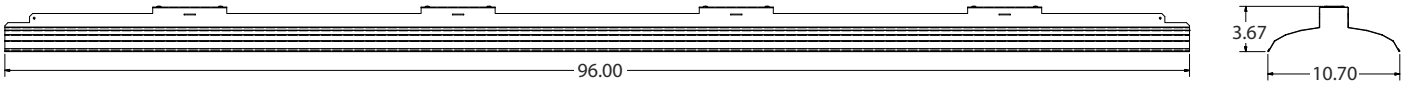
L24 Reflector



L48 Reflector



L96 Reflector



PHOTOMETRICS

Please see www.lithonia.com

PLUG-IN WIRING 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. 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.

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

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

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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		
LC0ZU	CMRB 50	MSI
LCH0SZU	CMRB 50 D	MSID
LCPZU	CMRB 50 P	MSIPED
LA0ZU	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	0 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

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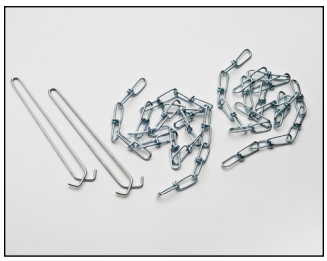
OPTIONS AND ACCESSORIES

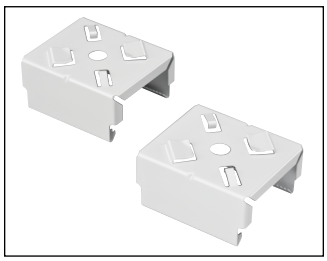
The Z Series fixture offers numerous options for almost every electrical and optical component, including a long list of field-installable accessories.



HANGER CHAIN

36" chain with Y hanger.

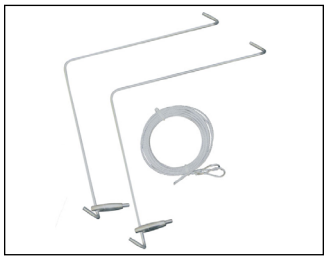
Order as:
HC36



Z SPRING HANGER

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

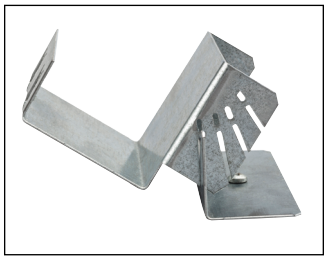
Order as:
ZSPRG



ZACVH HANGER

10' Aircraft cable with Y hanger.

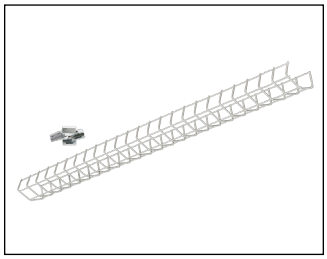
Order as:
ZACVH



ANGLE MOUNTING BRACKET

Luma-tilt™ angle bracket ships as a pair

Order as:
ZLANGBKT



WIRE GUARD

Order as:
WGZ24
WGZ48

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