# LITHONIA LIGHTING®

**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℃).

**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℃) and 86°F (30℃).
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.

**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 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 ℃.

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

# ZL1D LED Striplight

A+ Capable options indicated by this color background.

**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 | 1500LM | 1,500 lumens | FST | Drop lens | MVOLT | 120-277V | 27K | 2700 K | 80CRI | 80 CRI |
| | | | | SMR | Symmetric | 2500LM | 2,500 lumens | | | 120 | 120V | 30K | 3000 K | 90CRI | 90 CRI |
| | | | | | | 3500LM | 3,500 lumens | | | 208 | 208V | 35K | 3500 K | | |
| | | L48 | 48" | (blank) | Less reflector | 3000LM | 3,000 lumens | | | 240 | 240V | 40K | 4000 K | | |
| | | | | ASR | Asymmetric | 5000LM | 5,000 lumens | | | 277 | 277V | 50K | 5000 K | | |
| | | | | SMR | Symmetric | 7000LM | 7,000 lumens | | | 347 | 347V ‡ | | | | |
| TZL1D | LED striplight‡ | L96 | 96" | (blank) | Less reflector | 6000LM | 6,000 lumens | | | 480 | 480V ‡ | | | | |
| | | | | SMR | Symmetric | 10000LM | 10,000 lumens | | | | | | | | |
| | | | | | | 14000LM | 14,000 lumens | | | | | | | | |

## Options

| | |
|---|---|
| PLR__ | Plug-in wiring‡ |
| PLR1LVG | Plug-in wiring-low voltage‡ |
| E7W | 7W Emergency battery pack, constant power, Title 20 Compliant, User selectable Self-Diagnostic, AC Activate with Integral Test Switch‡ |
| 2E7W | (2) 7W Emergency battery pack, constant power, Title 20 Compliant, User selectable Self-Diagnostic, AC Activate with Integral Test Switch‡ |
| E10W | 10W Emergency battery pack, constant power, Title 20 Compliant, User selectable Self-Diagnostic, AC Activate with Integral Test Switch‡ |
| 2E10W | (2)10W Emergency battery pack, constant power, Title 20 Compliant, User selectable Self-Diagnostic, AC Activate with Integral Test Switch‡ |
| 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 and/or Build America Buy America Qualified |

**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) | 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 |
| | | 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 |
| | | ZLR L48 SYM UPL WH | 48" symmetric reflector with uplight, white finish |
| NPP16D | nLight® wired power/relay pack, 0-10VDC dimming output (LINK) | ZLR L48 SYM WH | 48" symmetric reflector, white finish |
| RPP20D | nLight® air Generation 2 enabled, power/relay pack, 0-10V dimming output (LINK) | ZLR L92 SYM UPL WH | 92" symmetric reflector with uplight, white finish |
| | | ZLR L92 SYM WH | 92" symmetric reflector, white finish |
| LSXR | Sensor Switch® LSXR occupancy sensor (LINK) | ZLR L96 SYM UPL WH | 96" symmetric reflector with uplight, white finish |
| ZSPRG J2 | Tong and T-grid hanger, for 15/16" T-grid (Order quantity required in multiples of 2) | ZLR L96 SYM WH | 96" symmetric reflector, white finish |
| | | UNIVERSAL REFL ALIGNER | Universal reflector aligners, quantity 1 |
| WGZ24 | 24" wireguard, white ‡ | | |
| WGZ48 | 48" wireguard, white ‡ | | |

# ZL1D  LED Striplight

| Option value | Restriction |
|---|---|
| **‡ Option Value Ordering Restrictions** | |
| 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. |
| 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. |

# 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.
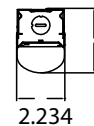
Specifications subject to change without notice.

### PALLET DIMENSIONS

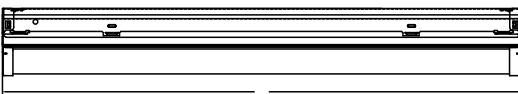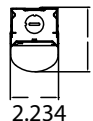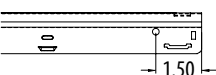| Length | Approximate weight | Fixtures per pallet | Approximate pallet dimensions (L x W x H) |
|---|---|---|---|
| L24 | 7 lbs. | 176 | 46" X 51" X 31 5/8" |
| L48 | 13 lbs. | 176 | 46" X 51" X 31 5/8" |
| L96 | 26 lbs. | 63 | 46" X 98 1/2" X 31 3/8" |
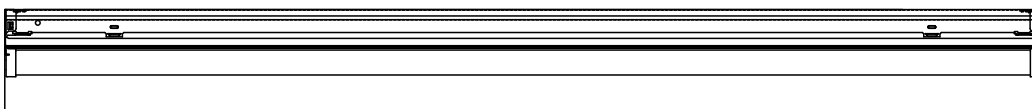


48.028

ZL1D L48

2.9882

2.234



24.028

ZL1D L24

Knockout hole is .86in in diameter.

2.9882

2.234

Mounting Hole Location - All Lengths
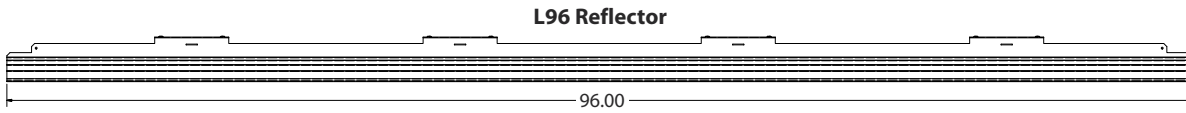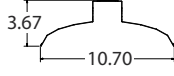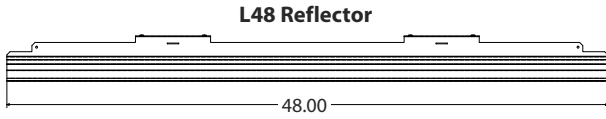
1.50

## 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
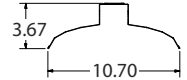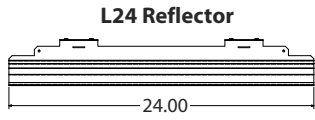
## PHOTOMETRICS

Please see www.lithonia.com

## PLUG-IN WIRING INFORMATION

**Wiring**

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.

# 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 | Circuits to which driver is connected | | Battery charging circuit (must be unswitched) | | 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

## 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°<br>B  Low mount, 360°<br>C  High mount aisleway | O  None[1]<br>H  High/low occupancy operation<br>P  Switching photocell (on/off)[1]<br>M  Dimming and switching photocell<br>G  Dimming and switching photocell with high/low occupancy operation | 0  10 VDC<br>9  9 VDC<br>8  8 VDC<br>7  7 VDC | S  Minimum dim level of ballast<br>1  1 VDC<br>2  2 VDC<br>3  3 VDC<br>4  4 VDC<br>5  5 VDC<br>6  6 VDC | Z  None<br>T  Low temperature[2] | I  30 sec<br>D  2.5 min<br>X  5.0 min<br>R  7.5 min<br>U  10.0 min (with minimum 15 minute on time)<br>V  15.0 min<br>W  20.0 min<br>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°<br>B  Low mount, 360°<br>C  High mount aisleway | 2  Dual relay | J  None<br>K  Alternating off relays (promotes even lamp wear)<br>O  Alternating off relays w/photocell<br>P  Switching photocell(on/off)<br>E  Photocell on/off (pole 1 only)<br>F  Photocell on/off - both poles (dual set-point) | Z  None<br>T  Low temperature[1] | I  30 sec<br>D  2.5 min<br>X  5.0 min<br>R  7.5 min<br>U  10.0 min (with minimum 15 minute on time)<br>V  15.0 min<br>W  20.0 min<br>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°<br>10  Low mount 360°<br>50  High mount aisleway | [blank]  Single Lens<br>J10  10-pack<br>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.
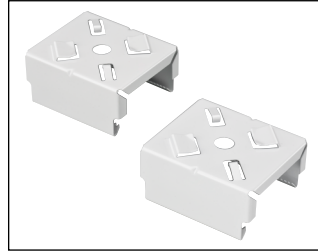
**HANGER CHAIN**

36" chain with Y hanger.
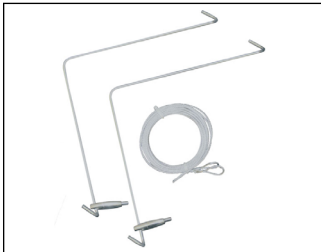
Order as:

HC36

**Z SPRING HANGER**

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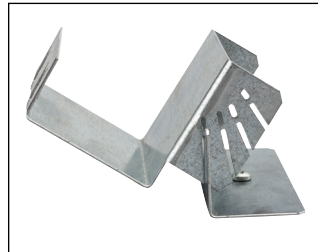
Order as:

ZSPRG

**ZACVH HANGER**

10' Aircraft cable with Y hanger.

Order as:

ZACVH

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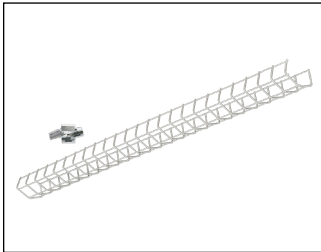
Luma-tilt™ angle bracket ships as a pair

Order as:

ZLANGBKT

**WIRE GUARD**

Order as:
WGZ24
WGZ48