



R Series - 3RLS/4RLS

3" and 4" Recessed Lighting Linear System



| OVERVIEW | |
|----------------------|-----------------------------------|
| Lumen Range | 391 - 1,040 |
| CCT | 2700K, 3000K, 3500K, 4000K, 5000K |
| Wattage Range | 16 - 22 |
| Efficacy Range (LPW) | 95 -118 |
| Weight lbs (kg) | 3 lbs/ft (1.3 kg/ft) |

QUICK LINKS

[Ordering Guide](#)
[Performance](#)
[Photometrics](#)
[Dimensions](#)

FEATURES & SPECIFICATIONS

Construction

- Rigid extruded aluminum housing for consistency and strength
- Die Cast Aluminum End Caps
- Available in varying lengths from 2' to 8' for individual or continuous row mounting
- Seamlessly create a variety of shapes with straight and corner units
- Housing is treated with phosphate rust inhibitor and painted with textured powder coat paint.
- Manufactured in the USA

Optical System

- High transmission snap-in impact resistant diffuse acrylic lens
- Minimum CRI of 82

Electrical

- High-performance driver features over-voltage, under-voltage, short-circuit and over temperature protection.
- 0-10V dimming (1% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High voltage (347 Vac).
- L70 Calculated Life: >100k Hours
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +40°C (-40°F to +104°F)
- Power factor: >.95
- Input power stays constant over life.

- Factory pre-wired to section ends with quick-wire connectors
- Optional 120-277V 12W integral emergency battery pack is available to meet critical life-safety lighting requirements. The 90-minute batteries provide constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed beneath the snap in lens mounted to the reflector.

Controls

- Optional integral passive infrared occupancy sensor available
- Optional integral daylight harvesting sensor available

Installation

- Mounting options include both Drywall and T-Grid
- Mounting brackets on housing sides support T-Grid installation
- Quick connect harness to attach fixtures in continuous rows
- Joiner tabs to ensure proper alignment from fixture to fixture
- Power access holes on top and end of fixtures
- 1/4" holes on support brackets for hanger wires in Grid installations
- 5/8" mounting holes on drywall fixtures for alternate mounting option

Warranty

- Complete warranty terms located at: <https://www.lsi-industries.com/resources/terms-and-warranty.aspx>.
- 1 Year warranty on optional Battery Backup. Test regularly in accordance with local codes.

Listings

- List for UL 1598 and UL 8750
- RoHS Compliant
- Suitable for damp locations
- Meets Buy American Act requirements
- State of California Title 24 compliant
- 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.





STRAIGHT ORDERING GUIDE

[Back to Quick Links](#)

TYPICAL ORDER EXAMPLE: **3RLS 4 LED 06L LF UE 40 WHT**

| Prefix | Length | LED Technology | Lumens (Per Foot) | Ceiling Wall Type |
|--|--|----------------|--|--|
| 3RLS - 3" Width 4RLS - 4" Width | 2 - 2' Length ¹ 3 - 3' Length 4 - 4' Length 5 - 5' Length 6 - 6' Length 7 - 7' Length 8 - 8' Length CVO - 2'x2' Corner Vertical Out ⁴ CVI - 2'x2' Corner Vertical In ⁴ CHO - 2'x2' Horizontal Corner | LED | 06L - 600 Lumens 10L - 1,000 Lumens 11L - 1,100 Lumens 13L - 1,300 Lumens | Individual GI - Grid Individual Unit (includes 2 endplates and starter harness) ³ FI - 3/4" Flange for Individual Unit in Drywall/Sheetrock (includes 2 endplates and starter harness) FLI - Flangeless for Individual Unit in Drywall/Sheetrock (includes 2 endplates and starter harness) Grid Continuous Row Mount Options GS - Grid Starter Unit (includes 1 endplate and starter harness) ³ GJ - Grid Joiner Unit (does not include endplates or starter harness) ³ GE - Grid Ender Unit (includes 1 endplate but no starter harness) ³ Drywall Continuous Row Mount Options FS - 3/4" Flange Starter Unit (includes 1 endcap and starter harness) FJ - 3/4" Flange Joiner Unit (does not include endplates or starter harness) FE - 3/4" Flange End Unit (includes 1 end cap but no starter harness) FLS - Flangeless Starter Unit (includes 1 endcap and starter harness) FLJ - Flangeless Joiner Unit (does not include endplates or starter harness) FLE - Flangeless End Unit (includes 1 end cap but no starter harness) |

| Lens | Voltage | Color Temperature | Fixture Finish | Options |
|----------------------|--|---|---|--|
| LF - Frosted Diffuse | UE - Universal Voltage (120V-277V) HV - High Voltage (347V) | 27 - 2700K ² 30 - 3000K 35 - 3500K 40 - 4000K 50 - 5000K ² | WHT - White BLK - Black MSV - Silver RAL - Custom Color (specify i.e. RAL829) | OCC - Occupancy Sensor DAY - Daylight Sensor DOC - Daylight and Occupancy Sensor EM - Emergency Battery Pack EC - Emergency Circuit EH - Emergency Through Harness ⁵ F - Fast Blow Fuse GMF - Slow Blow Fuse |

Notes:

- 1 - Sensor and Emergency battery options not available for this length
- 2 - Adds 1 week to published lead time
- 3 - Applies to 9/16" and 15/16" tegular and non-tegular grid ceiling
- 4 - Only available with flange or flangeless ceiling trim types
- 5 - EH is required if emergency circuit traverses multiple fixtures





PERFORMANCE

[Back to Quick Links](#)

| DELIVERED LUMENS - 4' | | | | | | |
|-----------------------|--------|-------|-------|-------|-------|---------|
| Size | Output | 3000K | 3500K | 4000K | 5000K | Wattage |
| 3' | 06L | 604 | 613 | 634 | 653 | 5.7 |
| | 10L | 919 | 934 | 965 | 993 | 8.7 |
| | 11L | 1,078 | 1,095 | 1,132 | 1,165 | 10.4 |
| | 13L | 1,222 | 1,242 | 1,283 | 1,321 | 12.0 |
| 4' | 06L | 630 | 640 | 662 | 681 | 5.7 |
| | 10L | 962 | 979 | 1,010 | 1,040 | 8.7 |
| | 11L | 1,127 | 1,147 | 1,184 | 1,220 | 10.4 |
| | 13L | 1,280 | 1,300 | 1,344 | 1,383 | 12.0 |

*LED Chips are frequently updated therefore values are nominal.

| ELECTRICAL DATA - PER FOOT* | | | | | |
|-----------------------------|--------|--------|--------|--------|--------|
| Drive Current | 120V | 208V | 240V | 277V | 347V |
| 06L | 0.048A | 0.027A | 0.024A | 0.021A | 0.016A |
| 10L | 0.073A | 0.042A | 0.036A | 0.031A | 0.025A |
| 11L | 0.087A | 0.050A | 0.043A | 0.038A | 0.030A |
| 13L | 0.100A | 0.058A | 0.050A | 0.043A | 0.035A |

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

| RECOMMENDED LUMEN MAINTENANCE | | | | | |
|-------------------------------|----------------------|---------------------|---------------------|---------------------|----------------------|
| Ambient | Initial ² | 25K hr ² | 50K hr ² | 75K hr ³ | 100K hr ³ |
| 0 C (32 F) | 1.02 | 0.96 | 0.94 | 0.92 | 0.90 |
| 5 C (41 F) | 1.02 | 0.96 | 0.94 | 0.91 | 0.89 |
| 10 C (50 F) | 1.01 | 0.95 | 0.92 | 0.89 | 0.86 |
| 15 C (59 F) | 1.01 | 0.95 | 0.91 | 0.87 | 0.83 |
| 20 C (68 F) | 1.00 | 0.94 | 0.89 | 0.84 | 0.80 |
| 25 C (77 F) | 1.00 | 0.92 | 0.86 | 0.81 | 0.75 |
| 30 C (86 F) | 0.99 | 0.91 | 0.83 | 0.77 | 0.71 |
| 35 C (95 F) | 0.98 | 0.91 | 0.80 | 0.70 | 0.62 |

1 - Lumen maintenance values at 25C are calculated per TM-21 based on LM-80 data and in-situ testing.

2 - In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times the IESNA LM-80-08 total test duration for the device under testing.

3 - In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times the IESNA LM-80-08 total test duration for the device under testing.

PHOTOMETRICS

[Back to Quick Links](#)

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

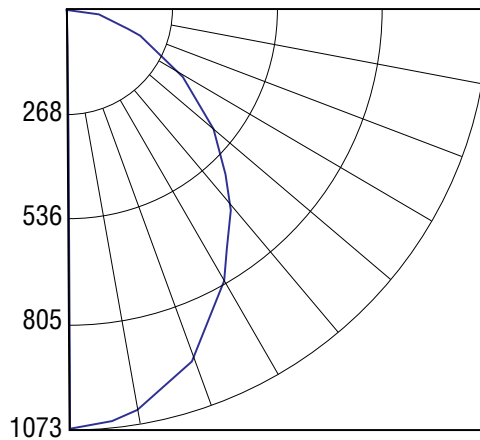
See <http://www.lsi-industries.com/products/led-lighting-solutions.aspx> for detailed photometric data.

3RLS 4 LED 06L XX LF XX 40 WHT

Zonal Lumen Summary

| Zone | Lumens | %Luminaire |
|--------|---------|------------|
| 0 - 30 | 781.0 | 31% |
| 0-40 | 1,239.3 | 49.2% |
| 0-60 | 2,063.3 | 81.9% |
| 60-90 | 455.9 | 18.1% |
| 70-100 | 184.1 | 7.3% |
| 90-120 | 0 | 0% |
| 0-90 | 2,519.3 | 100% |
| 90-180 | 0 | 0% |
| 0-180 | 2,519.3 | 100% |

POLAR CURVE

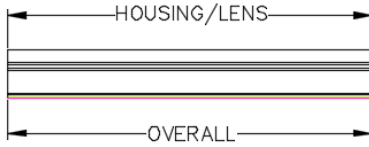




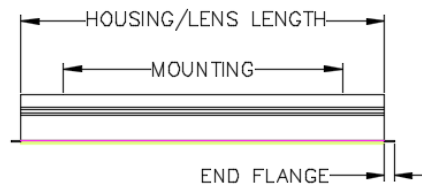
STRAIGHT DIMENSIONS

[Back to Quick Links](#)

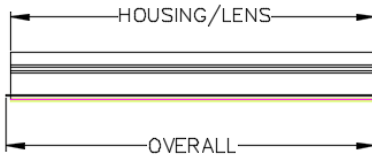
GRID JOINER FIXTURE (GJ)



DRYWALL/SHEETROCK FIXTURE (F,FL)

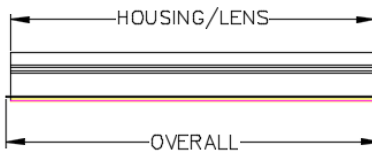


GRID STARTED / ENDER FIXTURE (GS,GE)



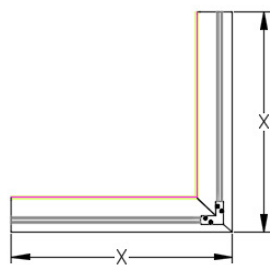
| Grid Fixtures | 2' Housing | 2' Overall | 3' Housing | 3' Overall | 4' Housing | 4' Overall | 5' Housing | 5' Overall | 6' Housing | 6' Overall | 8' Housing | 8' Overall |
|----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Individual Grid Unit | 23.36 | 23.96 | 35.36 | 35.96 | 47.36 | 47.96 | 59.36 | 59.96 | 71.36 | 71.96 | 95.36 | 95.96 |
| Starter or Ender Grid Unit | 23.68 | 23.98 | 35.68 | 35.98 | 47.68 | 47.98 | 59.68 | 59.98 | 71.68 | 71.98 | 95.68 | 95.98 |
| Joiner Grid Unit | 24.00 | 24.00 | 36.00 | 36.00 | 48.00 | 48.00 | 60.00 | 60.00 | 72.00 | 72.00 | 96.00 | 96.00 |

GRID INDIVIDUAL FIXTURE (GI)

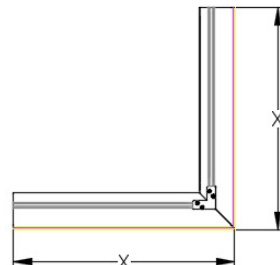


| Drywall Fixtures | Housing & Lens | Flange Fixture Overall (End Flange) | Flangeless Fixture Overall (End Flange) | Mounting |
|------------------|----------------|-------------------------------------|---|----------|
| 2ft | 24.00 | Add .80 Trim @ Start and End of Run | Add 1.35 Trim @ Start and End of Run | 18.00 |
| 3ft | 36.00 | Add .80 Trim @ Start and End of Run | Add 1.35 Trim @ Start and End of Run | 30.00 |
| 4ft | 48.00 | Add .80 Trim @ Start and End of Run | Add 1.35 Trim @ Start and End of Run | 42.00 |
| 5ft | 60.00 | Add .80 Trim @ Start and End of Run | Add 1.35 Trim @ Start and End of Run | 54.00 |
| 6ft | 72.00 | Add .80 Trim @ Start and End of Run | Add 1.35 Trim @ Start and End of Run | 66.00 |
| 8ft | 96.00 | Add .80 Trim @ Start and End of Run | Add 1.35 Trim @ Start and End of Run | 90.00 |

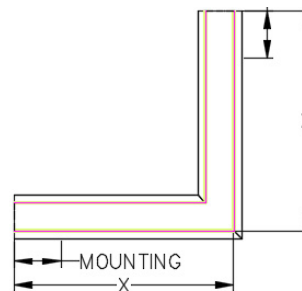
CORNER DIMENSIONS



DRYWALL/SHEETROCK VERTICAL IN FIXTURE (CVI F, CVI FL)



DRYWALL/SHEETROCK VERTICAL OUT FIXTURE (CVO F, CVO FL)



DRYWALL/SHEETROCK HORIZONTAL FIXTURE (CHO F, CHO FL)

| Grid Fixture | Housing | Lens | Overall w/End Cap |
|-------------------------|---------|-------|-------------------|
| Grid Horizontal Fixture | 23.56 | 23.35 | 23.86 |

| Drywall Fixtures | Dim X | Mounting | Flange End Cap Trim Length | Flangeless End Cap Trim Length |
|------------------|-------|----------|-------------------------------|--------------------------------|
| Horizontal | 23.00 | 3.00 | Add .80 Trim @ End of Fixture | Add 1.35 Trim @ End of Fixture |
| Vertical Inside | 23.00 | N/A | Add .80 Trim @ End of Fixture | Add 1.35 Trim @ End of Fixture |
| Vertical Outside | 23.00 | N/A | Add .80 Trim @ End of Fixture | Add 1.35 Trim @ End of Fixture |

