

**DIGITAL NAVIGATION**

[Ordering Tree](#) [nLight Platform](#) [SensorSwitch JOT](#) [Photometrics](#) [Performance Data](#)

**FEATURES & SPECIFICATIONS**

**INTENDED USE** — The 2BLT4R is designed to retrofit nearly any 2x4 fluorescent lensed or parabolic troffer with normal dimensions and construction (see dimensions). The standard kit is designed for T-grid mounted recessed units, but optional brackets are available for drywall / "hard-lid" ceilings or surface mounted housings. All 2BLT4Rs are UL rated for use in air-handling troffer housings. Integrated system bypasses all old fluorescent components for reliable, long-lasting performance and is a perfect platform for modern networked controls. Certain airborne contaminants can diminish integrity of acrylic. [Click here for Acrylic Environmental Compatibility table for suitable uses.](#)

**CONSTRUCTION** — Universal end brackets are painted steel and are designed to fit securely in nearly any 2x4 lensed or parabolic troffer (see dimensional requirements). Unitized doorframe reflector and electrical chassis does not require any field assembly, and is painted after fabrication with high reflectivity matte white powder coating. Diffuser trim rings add a finished appearance while providing a mounting point for integral controls and sensors. All electrical and mechanical components can be accessed from below the ceiling plane.

**OPTICS** — Volumetric illumination is achieved by creating an optimal mix of light to walls, partitions and vertical and horizontal work surfaces – rendering the interior space, objects and occupants in a more balanced, complimentary luminous environment. High performance extruded acrylic diffusers conceal LEDs and efficiently deliver light in a volumetric distribution. Four diffuser choices available - curved and square designs with linear prisms or a smooth frosted finish. Optional lower glare, very low UGR (Unified Glare Rating) lens available.

**ELECTRICAL** — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. Greater than 80% LED lumen maintenance at 60,000 hours (L80+ > 60,000). Calculated L70 lumen maintenance greater than 150,000 hours. Color variation within 3-step MacAdam ellipse (3SDCM)

**Base (non-configurable) BLTR:** Generic 0-10 volt dimming driver. Dims to 10%

**Configurable BLTR:** 2x4 BLTR kits provide > 135 LPW across a broad range of lumen outputs, CCTs, and driver options. eldoLED driver options deliver choice of dimming range, and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Step-level dimming option allows system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.

Optional Field Adjustable Output (FAOE, FAO) devices provide a simple mechanical means of "dialing in" preferred high-end lumens.

**SENSOR — Integrated sensor (individual control):** SensorSwitch MSD7ADCX ((Passive infrared (PIR) or MSDPDT7ADCX ((PIR/Microphonics Dual Tech (PDT)) integrated occupancy sensor/automatic dimming photocell allows the luminaire to power off when the space is unoccupied or enough ambient light is entering the space. See page 5 for more details on the integrated sensor.

**Integrated Sensor (nLight Wired Networking):** This sensor is nLight-enabled, meaning it has the ability to communicate over an nLight network. When wired, using CAT-5 cabling, with other nLight-enabled sensors, power packs, or WallPods, an nLight control zone is created. Once linked to a Gateway, directly or via a Bridge, the zone becomes capable of remote status monitoring and control via SensorView software. See page 6 for the nLight sensor options.

**Integrated Smart Sensor (nLight Air Wireless Platform):** The rES7 sensor is nLight AIR enabled, meaning it has the ability to communicate over the wireless nLight control platform. It is available with an automatic dimming photocell, and either a digital PIR or microphonics (PDT) dual technology occupancy sensor. It pairs to other luminaires and wall switches through our mobile app, CLAIRITY™, which allows for simple sensor adjustment. See page 6 for more details on the Integrated Smart Sensor.

**Integrated Wireless Sensor (single room control):** SensorSwitch VERTEX.JOT or JOTVTX15 luminaire-embedded occupancy and ambient light sensor allows the luminaire to power off when the space is unoccupied or when enough ambient light is entering the space. See page 4 for more details on the integrated wireless sensor.

**INSTALLATION** — After existing fluorescent components are removed from the host housing, universal end brackets are secured in place with TEKS™ screws. The BLTR's integrated driver and light engine door assembly can then be hinged to the universal end brackets and will hang in place for completion of assembly plug-in wiring. Rotate the doorframe assembly closed and pivot the cam latches to secure the doorframe in place. Suitable for damp location installations. Damp location not available with sensor versions.

**LISTINGS** — UL/cUL Listed for use in fluorescent luminaires. Classified for use in both static and air-handling troffer housings (see installation instructions for details). Installing Relight assemblies per instructions will not impact existing fixture UL listing. Tested to LM80 standards.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://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](http://www.acuitybrands.com/buy-american) for additional information.

Standard 2BLT4R meets TAA requirements.

**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](http://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           |

**BLTR Relight Series**

# 2BLT4R

2' x 4' Relight LED



*Specifications*

Length: 47.8 (121.4)

Width: 23.9 (60.7)

Depth: 2.75 (6.9)

Weight: 16.25 (41.2)

All dimensions are inches (centimeters) unless otherwise specified.

**Embed nLight controls today. Prepare for tomorrow.**

| Now                     | Tomorrow            |
|-------------------------|---------------------|
| User-friendly install   | Scalability         |
| Enhanced energy savings | Space configuration |
| Code compliance         | Future-ready        |

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit [www.acuitybrands.com/designselect](http://www.acuitybrands.com/designselect). \*See ordering tree for details

# 2BLT4R Volumetric Recessed Lighting 2'x4' Relight

**ds** Design Select options indicated by this color background.

## ORDERING INFORMATION

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

**Example:** 2BLT4R 40L ADP EZ1 LP840

| 2BLT4R          | Series           | Trim Type/ Air Function <sup>1</sup>   | Lumens <sup>2</sup>  | Diffuser  | Voltage  | Driver   | Color temperature  |
|-----------------|------------------|--|--|---|--|--|--|
| 2BLT4R 2X4 BLTR | (blank) 2X4 BLTR | Standard white two-piece flanged bracket (meets air handling requirements but may not match air-handling paint finish) | <b>Nominal lumen output (standard high efficiency &gt; 135LPW)</b> | ADP Curved, linear prisms<br>ADSM Curved, smooth<br>SDP Square, linear prisms<br>SDSM Square, smooth<br>LUGR Very low UGR lens  | (blank) MVOLT<br>120 120V<br>277 277V<br>347 347V <sup>4,5</sup> | EZ1 eldoLED dims to 1% (0-10 volt dimming)<br>GZ1 Dims to 1% (0-10V dimming) <sup>6</sup><br>GZ10 Dims to 10% (0-10V dimming) <sup>6</sup><br>SLD Step-level dimming <sup>7</sup><br>EOHN Specialized drivers for use only with Atrius systems | LP830 82CRI, 3000 K<br>LP835 82CRI, 3500 K<br>LP840 82CRI, 4000 K<br>LP850 82CRI, 5000 K<br>LP930 90CRI, 3000K <sup>20</sup><br>LP935 90CRI, 3500K <sup>20</sup><br>LP940 90CRI, 4000K <sup>20</sup><br>LP950 90CRI, 5000K <sup>20</sup> |
|                 | A                | Standard two-piece flanged bracket painted black to match parabolic / air-handling reveals                             | 20L 2000<br>30L 3000<br>40L 4000<br>48L 4800                       | <b>Diffusers w/ trim rings</b><br>ADPT Curved, linear prisms<br>ADSMT Curved, smooth<br>SDPT Square, linear prisms<br>SDSMT Square, smooth<br>LUGRT Very low UGR lens with trim |  |  |  |
|                 | F                | Flangeless two-piece bracket for installation in drywall / "hard lid" ceilings   | 60L 6000<br>72L 7200   |   |  |  |  |
|                 | LPB              | One-piece low profile bracket for installation in some obstructed housings (consult factory) (see pg. 4)               |  |   |  |  |  |

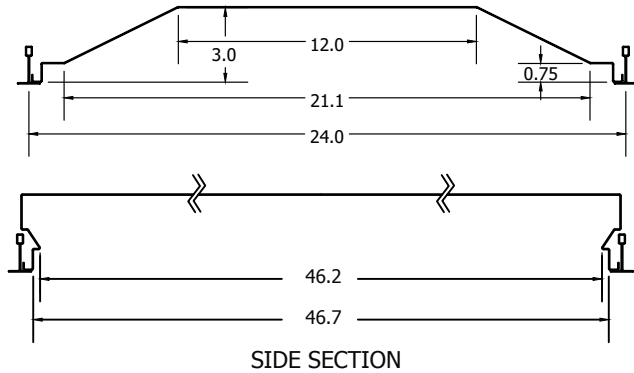
| nLight Interface  | Control <sup>8</sup>   | Individual Control   | Standby Mode                                | Options  |
|---|--|--|---|--|
| <b>nLight Wireless</b><br>(blank) no nLight <sup>®</sup> interface<br>NLTAIR2 nLight AIR Generation 2 enabled <sup>8</sup>  | <b>nLight Wireless</b><br>RES7 nLight AIR control with PIR integral occupancy sensor and automatic dimming photocell <sup>16</sup><br>RES7PDT nLight AIR control with PDT dual technology integral occupancy sensor and automatic dimming photocell <sup>16</sup><br>RIO nLight AIR radio module without sensor <sup>16</sup><br>RES7EM nLight AIR PIR integral occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection <sup>16</sup><br>RES7PDTEM nLight AIR microphonics dual technology occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection <sup>15</sup><br>RIOEM nLight AIR radio module less sensor, with UL924 Emergency Operation, via power interrupt detection <sup>18</sup> | MSD7ADCX PIR integral occupancy sensor with automatic dimming control photocell <sup>11</sup><br>MSDPDT7ADCX PDT integral occupancy sensor with automatic dimming control photocell <sup>11</sup><br>JOT Wireless room control with "Just One Touch" pairing <sup>17</sup><br>JOTVTX15 Wireless occupancy sensor with "Just One Touch" pairing <sup>17</sup> | NOC Occupancy sensor disabled <sup>12</sup> | FAOE Field adjustable output - Energy Focused, 8 increment selections down to 17% wattage / 23% lumens<br>FAO Field adjustable output (old style) - 8 increment selections down to 71% wattage / 67% lumens<br>BDP Disconnect Plug<br>EL7L 700 lumen battery pack (Noncompliant with CA T20)<br>EL14L 1400 lumen battery pack (Noncompliant with CA T20)<br>E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, (Certified in CA Title 20 MAEDBS)<br>BGTD Bodine Generator Transfer Device <sup>13</sup><br>GLR Fast-blowing fuse <sup>14</sup><br>GMF Slow-blowing fuse <sup>14</sup><br>NPLT Narrow pallet<br>BAA Buy America(n) Act Compliant<br>JP20 Job Pack |
| <b>nLight Wired</b><br>(blank) no nLight <sup>®</sup> interface<br>N80 nLight with 80% lumen management<br>N80EMG nLight with 80% lumen management. For use with generator supply EM power <sup>7</sup><br>N100 nLight without lumen management<br>N100EMG nLight without lumen management. For use with generator supply EM power <sup>7</sup> | <b>nLight Wired</b><br>(blank) No sensor control<br>NES7 nLight™ nES 7 PIR integral occupancy sensor <sup>10</sup><br>NESPDT7 nLight™ nES PDT 7 dual technology integral occupancy control <sup>10</sup><br>NES7ADCX nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell <sup>10</sup><br>NESPDT7ADCX nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell <sup>10</sup>   |  |   |  |

### Notes

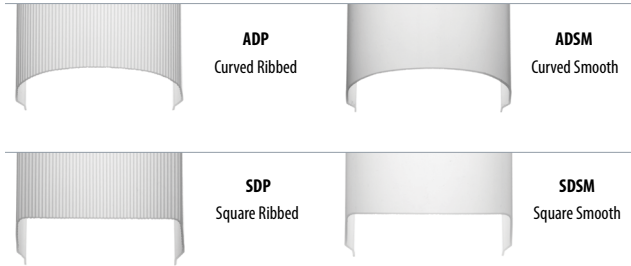
- Consult factory for airflow data.
- Approximate lumen output.
- Not available with EL7L or EL14L battery packs.
- 347 not available with SLD.
- GZ1, GZ10 not available with any Control or Sensor options.
- Not available with N80, N80EMG, N100, N100EMG, NLTAIR2, or occupancy control.
- nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.
- Must order with RES7, RES7PDT, or RIO sensor. Only available with EZ1 driver.
- Must specify diffuser with trim rings. See sensor options on page 4.
- Requires N80, N80EMG, N100, or N100EMG.
- Only available with EZ1 driver option. 0-10v dimming wires not accessible via access plate. Not available with Controls options.
- Can only be ordered in conjunction with EZ1, NLTAIR2, RES7/RES7PDT. Occupancy sensor disabled at factory but can be re-enabled upon commissioning.
- Requires BSE labeling.
- Must specify voltage, 120 or 277 with GLR & GMF fusing.
- GZ1 and GZ10 driver not available with battery pack when specifying 72LHE or 85LHE lumen options. Must use EZ1 driver.
- See UL924 Sequence of Operation instruction on page 3. When combined with the EZ1 option, can be used as a normal power sensing device for nLight AIR devices and luminaires with EM emergency options.
- Wired 0-10v dimming control not available. Not available with nLight Interface or Controls options. Not available with NOC, SLD, BGTD, or FAO. Must specify diffuser with trim rings.

## Fit & Compatibility

The 2BLT4R Relight Assembly was designed to upgrade recessed 2x4 fixtures, including most parabolic and lensed troffers from all major manufacturers. Dimensional requirements are below, but Lithonia Lighting recommends a trial installation prior to purchasing project quantities.



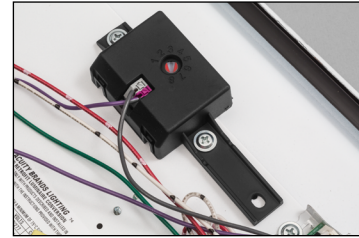
## Multiple Diffuser Options



| Performance Data - ADP Diffuser |        |             |     |
|---------------------------------|--------|-------------|-----|
| Lumen Package                   | Lumens | Input Watts | LPW |
| 20L ADP LP830                   | 2,067  | 14.8        | 139 |
| 20L ADP LP835                   | 2,096  | 14.8        | 141 |
| 20L ADP LP840                   | 2,153  | 14.8        | 145 |
| 20L ADP LP850                   | 2,188  | 14.8        | 148 |
| 30L ADP LP830                   | 3,089  | 22.3        | 138 |
| 30L ADP LP835                   | 3,131  | 22.3        | 140 |
| 30L ADP LP840                   | 3,217  | 22.3        | 144 |
| 30L ADP LP850                   | 3,260  | 22.3        | 146 |
| 40L ADP LP830                   | 3,867  | 29.0        | 133 |
| 40L ADP LP835                   | 3,921  | 29.0        | 135 |
| 40L ADP LP840                   | 4,028  | 29.0        | 139 |
| 40L ADP LP850                   | 4,074  | 29.0        | 140 |
| 48L ADP LP830                   | 4,765  | 34.0        | 140 |
| 48L ADP LP835                   | 4,831  | 34.0        | 142 |
| 48L ADP LP840                   | 4,964  | 34.0        | 146 |
| 48L ADP LP850                   | 5,019  | 34.0        | 148 |
| 60L ADP LP830                   | 5,909  | 42.9        | 138 |
| 60L ADP LP835                   | 5,991  | 42.9        | 140 |
| 60L ADP LP840                   | 6,155  | 42.9        | 143 |
| 60L ADP LP850                   | 6,210  | 42.9        | 145 |
| 72L ADP LP830                   | 6,969  | 52.2        | 134 |
| 72L ADP LP835                   | 7,065  | 52.2        | 135 |
| 72L ADP LP840                   | 7,259  | 52.2        | 139 |
| 72L ADP LP850                   | 7,302  | 52.2        | 140 |

| Lumen Multiplier for Lens Options (input wattage remains unchanged) |      |      |      |      |       |      |       |       |  |
|---|------|------|------|------|-------|------|-------|-------|--|
| ADSM  | SDP  | SDSM | LUGR | ADPT | ADSMT | SDPT | SDSMT | LUGRT |  |
| 1.02  | 1.02 | 1.02 | 1.14 | 0.93 | 0.95  | 0.95 | 0.95  | 1.06  |  |

## Optional Adjustable Output



### FAOE SETTINGS - Field Adjustable Output - Energy Focused

|        | 0-10 Voltage Dial Setting | % Lumen Output (approximate) | % Input Wattage (approximate) |
|--------|---------------------------|------------------------------|-------------------------------|
| Step 8 | Full Output               | 100%                         | 100%                          |
| Step 7 | 7.5 VDC                   | 95%                          | 93%                           |
| Step 6 | 6.5 VDC                   | 85%                          | 79%                           |
| Step 5 | 5.5 VDC                   | 75%                          | 66%                           |
| Step 4 | 4.5 VDC                   | 63%                          | 53%                           |
| Step 3 | 3.5 VDC                   | 51%                          | 41%                           |
| Step 2 | 2.5 VDC                   | 37%                          | 29%                           |
| Step 1 | 1.5 VDC                   | 23%                          | 17%                           |

### FAO SETTINGS - Field Adjustable Output

|        | 0-10 Voltage Dimmer | % Lumen Output (approximate) | % Wattage (approximate) |
|--------|---------------------|------------------------------|-------------------------|
| Step 8 | Full Output         | 100%                         | 100%                    |
| Step 7 | 9.0 VDC             | 98%                          | 100%                    |
| Step 6 | 8.0 VDC             | 88%                          | 86%                     |
| Step 5 | 7.0 VDC             | 86%                          | 82%                     |
| Step 4 | 6.0 VDC             | 82%                          | 80%                     |
| Step 3 | 5.0 VDC             | 76%                          | 75%                     |
| Step 2 | 4.0 VDC             | 71%                          | 72%                     |
| Step 1 | 3.0 VDC             | 67%                          | 71%                     |

Simple adjustment of output through the use of a flat head screwdriver.

## Emergency Battery Pack Options - Field Installable

| Battery Model Number | Wattage | Runtime (Minutes) | Lumen Output* @ 120 Lumens/Watt | Other   |
|----------------------|---------|-------------------|---------------------------------|---|
| ILB CP07 2H A        | 7W      | 120               | 840                             | Storm Shelter / 2 Hour Runtime                                  |
| ILB CP10 A           | 10W     | 90                | 1200                            |   |
| ILBLP CP10 HE SD A   | 10W     | 90                | 1200                            | Title 20, Self Diagnostic                                       |
| ILB CP10 HE AELR A   | 10W     | 90                | 1200                            | Title 20; Enabled with Self Testing, Automated Reporting (STAR) |
| ILBLP CP15 HE SD A   | 15W     | 90                | 1800                            | Title 20, Self Diagnostic                                       |
| ILB CP20 HE A        | 20W     | 90                | 2400                            | Title 20  |
| ILB CP20 HE SD A     | 20W     | 90                | 2400                            | Title 20, Self Diagnostic                                       |

All the above are UL Listed products that are certified for field install external/remote to the fixture.  
 \*Minimum delivered lumen output to assist in product selection for increased fixture mounting height.  
 The CP10 delivered emergency illumination outperforms legacy 1400 lumen fluorescent emergency ballast.  
 Please contact us at [productsupportemergency@acuitybrands.com](mailto:productsupportemergency@acuitybrands.com) for any Emergency Battery related questions.

### UL924 Sequence of Operation

The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

### BSE Labeling Options




- BSE10** Drivers load transfer relay installed per manufacturer's instructions. Voltage, BGTD and BSE10 called out.
- BSE14** One voltage fixture with driver load control relay supplied with one prewire (PWS option). Prewire wired for normal circuit, the control relay for emergency circuit left unconnected. Voltage, BGTD, BSE14 and prewire called out, in the description.

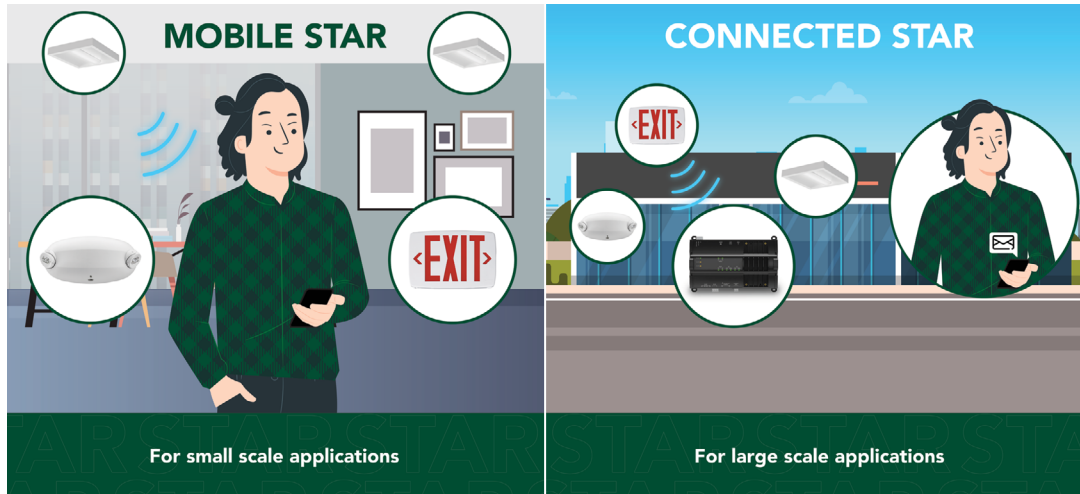
\*For configurations with Reloc or two voltages an RFA modification is required

## Enabled with STAR

**Emergency Lighting with Self-Testing Automated Reporting (STAR)**, enables self-testing and automated reporting to aid in life safety code compliance. Build your solution and choose your preferred deployment from Mobile STAR, where test data is logged in each individual unit and broadcast to the CLAIRity™+ app, or Connected STAR, where test data is logged in the STAR Gateway by IOTA® and emailed directly. **Leave the ladders, disruptions and written records behind with emergency lighting solutions with STAR!**

**Life Safety Code NFPA 101 testing and reporting requirements for emergency lighting include:**

-  Testing for 30 seconds every 30 days
-  Testing for 90 minutes once a year
-  Record keeping and to report to the authority having local jurisdiction



## Application Guide



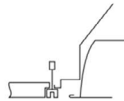
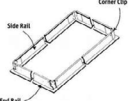
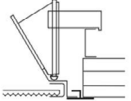


**2BLT4R** — Typically used for lensed troffer installations. Assembly contains white end brackets and is supplied with white trim strips for use in closing gaps down fixture sides (installer's choice - not required).

*\*Note: This kit is also UL rated for use in air-handling host housings, but white end bracket may not match fixture finish. This kit will fit in Lithonia's Avante non-air fixture.*

**2BLT4R A** — Typically used for parabolic installations with black reveal. Assembly contains black end brackets to match black reveal around host housing. Does not interfere with host housing air supply/return if present (along fixture sides).



### BLTR Bracket "fit" recommendations

|                                      |  |  |  |  |  |  |  |
|--------------------------------------|---|---|---|---|--|---|---|
| <b>Ceiling type</b>                  | 15/16" T-grid   | 9/16" T-grid  | Narrow Screw-slot   | Hard Ceiling w/ "Lay-In" style plaster frame (drywall grid adapter)               | Hard Ceiling with Integral drywall mounting ('swing gate' housing)                 | 1x1 hard tile ceiling   | Deep louver riser ('renovator' parabolic)   |
| <b>Recommended BLTR bracket type</b> | Standard  | Standard  | F bracket *   | Standard  | F bracket  | F bracket   | LPB bracket   |

*\*Standard bracket may work in some*



### BLTR "F" bracket vs. standard

Because the "F" bracket does not have the standard T-grid return flange, it can be used in many hard ceiling / drywall frame installations where the standard bracket would be obstructed.

This "F" bracket can also often be used in narrow screw-slot grid ceilings.

### Replacement / Trial parts

**To order BLTR Standard 2pc end bracket replacement (shipped as assembled units):**

- 2x4 = Cl code \*257YX0 T5746 (qty 2 required per kit)
- 2x2 = Cl code \*257YX0 T5746 (qty 2 required per kit)
- 1x4 = Cl code \*259VRM T5745 (qty 2 required per kit)

**To order BLTR "F" 2pc end bracket replacement (shipped as assembled pairs):**

- 2x4 = Cl code \*254PVS 2BLTRF FLANGE BRKT ASSEMBLY (qty 1 req. per kit)
- 2x2 = Cl code \*254PVS 2BLTRF FLANGE BRKT ASSEMBLY (qty 1 req. per kit)
- 1x4 = Cl code \*255SWN BLTRF FLANGE BRKT ASSEMBLY (qty 1 req. per kit)

### Differences between standard BLTR 2pc bracket and LPB 1-piece low profile bracket



Current 2-piece bracket has upper "T" bracket that mounts in most troffer endplates and bridges over most obstructions

**To order BLTR Standard 2pc end bracket replacement (shipped as assembled units):**

- 2x4 = Cl code \*257YX0 T5746 (qty 2 required per kit)
- 2x2 = Cl code \*257YX0 T5746 (qty 2 required per kit)
- 1x4 = Cl code \*259VRM T5745 (qty 2 required per kit)

1-piece design was originally developed for large customer to fit some older troffers where standard bracket would not fit due to endplate obstructions

**To order BLTR low profile 1pc LPB bracket (shipped as assembled units):**

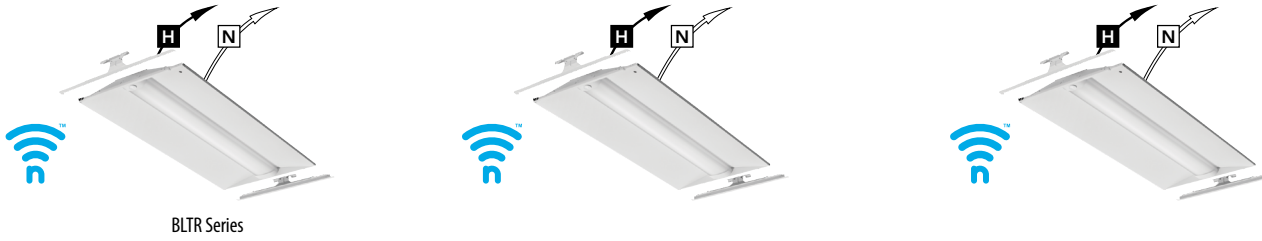
- 2x4 = Cl code \*268PIK GPF N320810 (qty 2 required per kit)
- 2x2 = Cl code \*268PIK GPF N320810 (qty 2 required per kit)
- 1x4 = Cl code n/a not available



## nLight Platform

| nLight embedded fixtures offer:           | Customers get:   |
|---|--|
| Manual Dimming                            | Convenience and visual comfort for occupants                           |
| Motion Sensing and/or Daylight Harvesting | Energy savings and code compliance                                     |
| Fixture or Group Level Control            | Ability to configure lighting to the space requirements                |
| Flexibility                               | Ease of fixture moves, adds and changes                                |
| Wireless Wall Switch (nLight AIR Only)    | Ease and flexibility of placement                                      |
| Astronomical and Time of Day Scheduling   | Energy savings and building security                                   |
| Scalable Solution                         | nLight controls to grow with your business                             |
| Future-Ready                              | nLight platform to set foundation for future upgrades and capabilities |

## nLight Air Wireless



### Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With CLAIRITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome



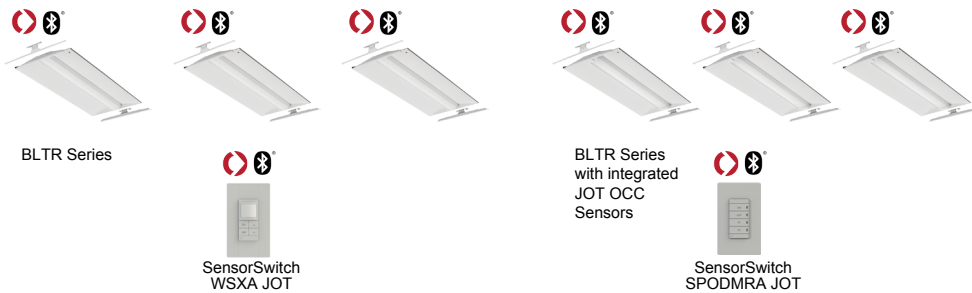
## JOT Wireless



### SensorSwitch JOT Enabled Wireless Solution

Designed with contractors in mind, the SensorSwitch JOT enabled wireless solution offers a straightforward approach to the installation and pairing of lighting fixtures and controls. Absolutely no 0-10V control wires and no mobile apps are needed with JOT enabled products, allowing for lightning speed installation right out of the box.

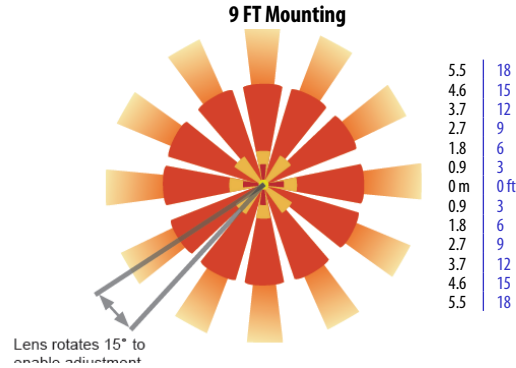
1. **Power:** Install JOT enabled fixtures and controls as instructed.
2. **Pair:** Insert the pairing tool into the pinhole on the wall switch; press and hold any button for 6 seconds.
3. **Play:** Once paired, each fixture will individually dim down to 10% brightness. All products will be fully functional.



| Sensor Options |                             |                   |     |                         |                       |
|----------------|-----------------------------|-------------------|-----|-------------------------|-----------------------|
| Option         | Automatic Dimming Photocell | Occupancy Sensing |     | nLight Wired Networking | nLight AIR Networking |
|                |                             | PIR               | PDT |                         |                       |
| MSD7ADCX       | X                           | X                 |     |                         |                       |
| MSDPDT7ADCX    | X                           |                   | X   |                         |                       |
| NES7           |                             | X                 |     | X                       |                       |
| NES7ADCX       | X                           | X                 |     | X                       |                       |
| NESPDT7        |                             |                   | X   | X                       |                       |
| NESPDT7ADCX    | X                           |                   | X   | X                       |                       |
| RES7           | X                           | X                 |     |                         | X                     |
| RESPDT7        | X                           | X                 | X   |                         | X                     |

### Sensor Coverage Pattern Mini 360° Lens

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m).
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor



### Integrated Sensor with Individual Control

The MSD7ADCX PIR occupancy sensor/automatic dimming photocell is ideal for areas without obstructions and where daylight harvesting may be desired. Suggested applications include, but not limited to, hallways, corridors, storage rooms, and breakrooms or other areas where people are typically moving.

The MSDPDT7ADCX PIR/Microphonics Dual Tech occupancy sensor/automatic dimming photocell is ideal for areas with obstructions and where daylight harvesting is desired. Suggested applications include, but not limited to, open offices, private offices, classrooms, public restrooms, and conference rooms.

### nLight AIR Wireless

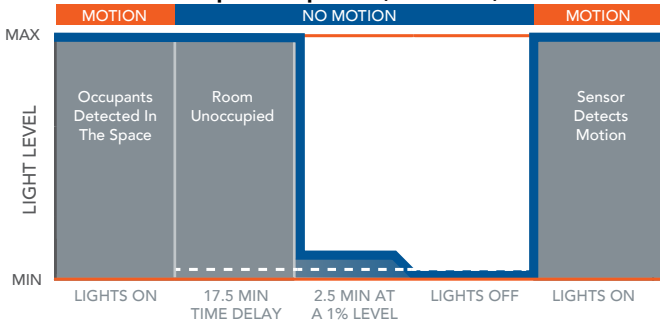
nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and nLight AIR is available with or without an integral sensor. The integrated rES7 or rES7PDT smart sensors are part of each luminaire in the nLight AIR network, which can be grouped to control multiple luminaires. The granularity of control with the digital PIR occupancy detection and daylight sensing makes a great solution for any application.

### nLight Wired Networking

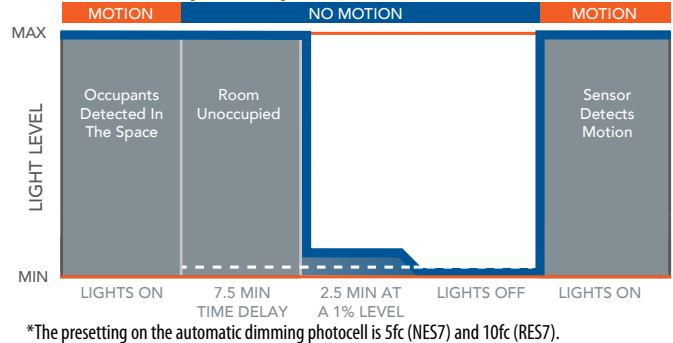
The nES7 is ideal for small rooms without obstructions or areas with primarily walking motion. Ideal areas include hallways, corridors, storage rooms, and breakrooms. Additionally, the nES7ADCX includes an integrated photocell, which enables daylight harvesting controls.

For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the nESPDT7ADCX includes an integrated photocell, which enables daylight harvesting controls which is ideal for areas where windows are present.

### Sequence of Operation (MSD7 Sensor)



### Sequence of Operation (nES7 and rES7 and Sensor)



## Controls Accessories

### nLight® Wired Control Accessories:

Order as separate catalog number. Visit [www.acuitybrands.com/products/controls/nlight](http://www.acuitybrands.com/products/controls/nlight).

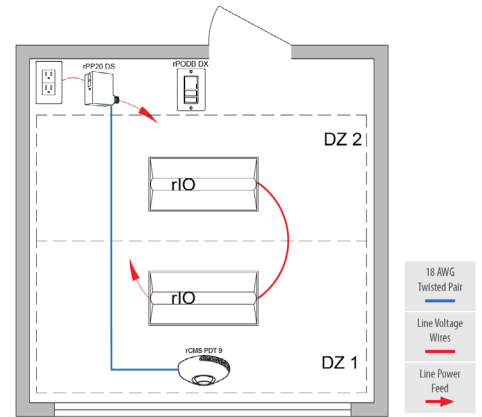
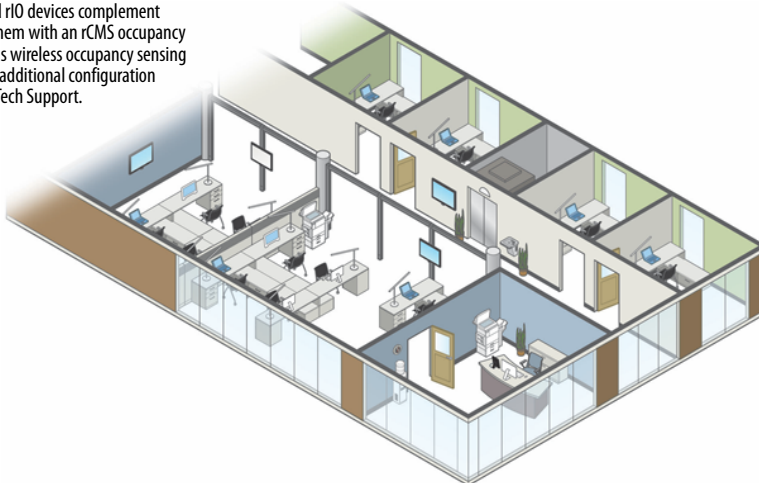
| WallPod stations     | Model number       | Occupancy sensors                            | Model number               |
|----------------------|--------------------|--|----------------------------|
| On/Off               | nPODMA [Color]     | Small motion 360°, ceiling (PIR / dual tech) | nCM 9 RJB / nCM PDT 9 RJB  |
| On/Off & raise/lower | nPODMA DX [Color]  | Large motion 360°, ceiling (PIR / dual tech) | nCM10 RJB / nCM PDT 10 RJB |
| Graphic touchscreen  | nPOD TOUCH [Color] | Wall switch with raise/lower                 | nWSX PDT LV DX [color]     |
| Photocell controls   | Model number       | Cat-5 cable (plenum rated)                   | Model number               |
| Full range dimming   | nCM ADCX RJB       | 10' cable                                    | CATS 10FT J1               |
|                      |                    | 30' cable                                    | CATS 30FT J1               |

### nLight® AIR Control Accessories:

Order as separate catalog number. Visit [www.acuitybrands.com/products/controls/nlightair](http://www.acuitybrands.com/products/controls/nlightair).

| Wall switches                    | Model number            |
|----------------------------------|-------------------------|
| On/Off single pole               | rPODBA [color] G2       |
| On/Off two pole                  | rPODB A2P [color] G2    |
| On/Off & raise/lower single pole | rPODBA DX [color] G2    |
| On/Off & raise/lower two pole    | rPODBA 2P DX [color] G2 |

BLTR fixtures with integrated rIO devices complement any small office space. Pair them with an rCMS occupancy sensor and the space now has wireless occupancy sensing and dimming capability. For additional configuration options please consult with Tech Support.



## rCMS<sup>1</sup> Example: RCMS PDT 10 AR G2

| Series / Detection                            | Power Supply <sup>1</sup>  | Occupancy Detection   | Lens (Required)   | Operating Mode                     | Generation                    |
|---|--|---|---|------------------------------------|-------------------------------|
| RCMS nLight AIR occupancy and daylight sensor | [blank] Power Supply ordered separately<br>PS 150 Standard 150 mA Power Supply | [blank] PIR Detection<br>PDT Dual Tech PIR/<br>Microphonics | 10 Large Motion/ Extended Range 360°<br>9 Small Motion/ Extended Range 360°<br>6 High Bay 360° Lens | [BLANK] None<br>AR Auxiliary Relay | G2 Generation 2 compatibility |

### Notes

1 RCMS requires low voltage power from either RPP20 DS 24V G2 or PS150.



SensorSwitch  
WSX



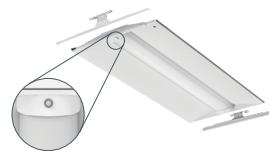
nLight WIRED  
NPOD UNITOUCH



nLight WIRED  
nPODMA DX



nLight AIR  
rPODBA



BLTR with rIO



rPODBA

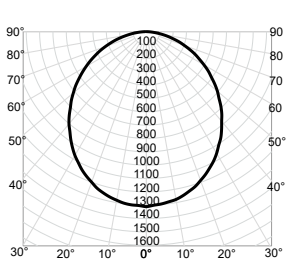


RCMS



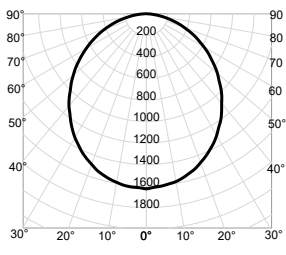
## PHOTOMETRICS

**2BLT4R 40L ADP LP835** Input Watts: 31.0, Delivered Lumens: 3960, LPW: 127.7, S/MH: 1.19, Test No: ISF 36900P313



| CP Summary |       |            |       | Zonal Lumen Summary |        |           |     |     |     |     |     |     |     | Coefficients of Utilization |                        |               |                   |     |       |  |  |  |  | Cone of Light |  |  | Luminance (cd/sq.m) |  |
|------------|-------|------------|-------|---------------------|--------|-----------|-----|-----|-----|-----|-----|-----|-----|-----------------------------|------------------------|---------------|-------------------|-----|-------|--|--|--|--|---------------|--|--|---------------------|--|
|            |       |            |       | Zone                | Lumens | % Fixture | pf  | 80% |     | 70% |     | 50% |     | Mounting Height             | Initial FC Center Beam | Beam Diameter | Average Luminance |     |       |  |  |  |  |               |  |  |                     |  |
|            |       |            |       | 0°                  |        |           | pw  | 50% | 30% | 10% | 50% | 30% | 10% | 50%                         | 30%                    | 10%           |                   |     |       |  |  |  |  |               |  |  |                     |  |
| 0°         | 1,311 | 0° - 30°   | 1,015 | 26%                 | 0      | 119       | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111                         | 6.0                    | 36.4          | 15.5              | 0°  | 2,115 |  |  |  |  |               |  |  |                     |  |
| 5°         | 1,296 | 0° - 40°   | 1,653 | 42%                 | 1      | 102       | 98  | 93  | 100 | 96  | 92  | 96  | 92  | 89                          | 8.0                    | 20.5          | 20.7              | 45° | 1,799 |  |  |  |  |               |  |  |                     |  |
| 15°        | 1,238 | 0° - 60°   | 2,931 | 74%                 | 2      | 88        | 81  | 75  | 86  | 80  | 74  | 83  | 77  | 72                          | 10.0                   | 13.1          | 25.9              | 55° | 1,672 |  |  |  |  |               |  |  |                     |  |
| 25°        | 1,125 | 0° - 90°   | 3,958 | 100%                | 3      | 77        | 69  | 62  | 76  | 68  | 61  | 72  | 66  | 60                          | 12.0                   | 9.1           | 31.0              | 65° | 1,540 |  |  |  |  |               |  |  |                     |  |
| 35°        | 972   | 90° - 180° | 2     | 0%                  | 4      | 68        | 59  | 52  | 67  | 58  | 52  | 64  | 57  | 51                          | 14.0                   | 6.7           | 36.2              | 75° | 1,309 |  |  |  |  |               |  |  |                     |  |
| 45°        | 789   | 0° - 180°  | 3,960 | 100%                | 5      | 61        | 51  | 45  | 60  | 51  | 44  | 57  | 50  | 44                          |                        |               |                   | 85° | 872   |  |  |  |  |               |  |  |                     |  |
| 55°        | 595   |            |       |                     | 6      | 55        | 45  | 39  | 54  | 45  | 39  | 52  | 44  | 38                          |                        |               |                   |     |       |  |  |  |  |               |  |  |                     |  |
| 65°        | 404   |            |       |                     | 7      | 50        | 41  | 34  | 49  | 40  | 34  | 47  | 39  | 34                          |                        |               |                   |     |       |  |  |  |  |               |  |  |                     |  |
| 75°        | 210   |            |       |                     | 8      | 45        | 36  | 30  | 44  | 36  | 30  | 43  | 36  | 30                          |                        |               |                   |     |       |  |  |  |  |               |  |  |                     |  |
| 85°        | 47    |            |       |                     | 9      | 41        | 33  | 27  | 41  | 33  | 27  | 40  | 32  | 27                          |                        |               |                   |     |       |  |  |  |  |               |  |  |                     |  |
| 90°        | 1     |            |       |                     | 10     | 38        | 30  | 25  | 38  | 30  | 25  | 37  | 30  | 25                          |                        |               |                   |     |       |  |  |  |  |               |  |  |                     |  |

**2BLT4R 48L ADP LP835** Input Watts: 31.0, Delivered Lumens: 4910, LPW: 130.6, S/MH: 1.19, Test No: ISF 36900P233



| CP Summary |       |            |       | Zonal Lumen Summary |        |           |     |     |     |     |     |     |     | Coefficients of Utilization |                        |               |                   |     |       |  |  |  |  | Cone of Light |  |  | Luminance (cd/sq.m) |  |
|------------|-------|------------|-------|---------------------|--------|-----------|-----|-----|-----|-----|-----|-----|-----|-----------------------------|------------------------|---------------|-------------------|-----|-------|--|--|--|--|---------------|--|--|---------------------|--|
|            |       |            |       | Zone                | Lumens | % Fixture | pf  | 80% |     | 70% |     | 50% |     | Mounting Height             | Initial FC Center Beam | Beam Diameter | Average Luminance |     |       |  |  |  |  |               |  |  |                     |  |
|            |       |            |       | 0°                  |        |           | pw  | 50% | 30% | 10% | 50% | 30% | 10% | 50%                         | 30%                    | 10%           |                   |     |       |  |  |  |  |               |  |  |                     |  |
| 0°         | 1,626 | 0° - 30°   | 1,259 | 26%                 | 0      | 119       | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111                         | 6.0                    | 45.2          | 15.5              | 0°  | 2,623 |  |  |  |  |               |  |  |                     |  |
| 5°         | 1,607 | 0° - 40°   | 2,050 | 42%                 | 1      | 102       | 98  | 93  | 100 | 96  | 92  | 96  | 92  | 89                          | 8.0                    | 25.4          | 20.7              | 45° | 2,231 |  |  |  |  |               |  |  |                     |  |
| 15°        | 1,535 | 0° - 60°   | 3,634 | 74%                 | 2      | 88        | 81  | 75  | 86  | 80  | 74  | 83  | 77  | 72                          | 10.0                   | 16.3          | 25.9              | 55° | 2,073 |  |  |  |  |               |  |  |                     |  |
| 25°        | 1,394 | 0° - 90°   | 4,908 | 100%                | 3      | 77        | 69  | 62  | 76  | 68  | 61  | 72  | 66  | 60                          | 12.0                   | 11.3          | 31.0              | 65° | 1,910 |  |  |  |  |               |  |  |                     |  |
| 35°        | 1,205 | 90° - 180° | 2     | 0%                  | 4      | 68        | 59  | 52  | 67  | 58  | 52  | 64  | 57  | 51                          | 14.0                   | 8.3           | 36.2              | 75° | 1,623 |  |  |  |  |               |  |  |                     |  |
| 45°        | 978   | 0° - 180°  | 4,910 | 100%                | 5      | 61        | 51  | 45  | 60  | 51  | 44  | 57  | 50  | 44                          |                        |               |                   | 85° | 1,082 |  |  |  |  |               |  |  |                     |  |
| 55°        | 737   |            |       |                     | 6      | 55        | 45  | 39  | 54  | 45  | 39  | 52  | 44  | 38                          |                        |               |                   |     |       |  |  |  |  |               |  |  |                     |  |
| 65°        | 500   |            |       |                     | 7      | 50        | 41  | 34  | 49  | 40  | 34  | 47  | 39  | 34                          |                        |               |                   |     |       |  |  |  |  |               |  |  |                     |  |
| 75°        | 260   |            |       |                     | 8      | 45        | 36  | 30  | 44  | 36  | 30  | 43  | 36  | 30                          |                        |               |                   |     |       |  |  |  |  |               |  |  |                     |  |
| 85°        | 58    |            |       |                     | 9      | 41        | 33  | 27  | 41  | 33  | 27  | 40  | 32  | 27                          |                        |               |                   |     |       |  |  |  |  |               |  |  |                     |  |
| 90°        | 1     |            |       |                     | 10     | 38        | 30  | 25  | 38  | 30  | 25  | 37  | 30  | 25                          |                        |               |                   |     |       |  |  |  |  |               |  |  |                     |  |

## Accessories & Replacement Parts

**Replacement Parts:** Order as separate catalog number.

|                                     |  |
|-------------------------------------|--|
| 2DBLTR48 ADP LENS ASSEMBLY          | 2x4 ft. replacement lens (trims included)    |
| 2DBLTR48 SDP LENS ASSEMBLY          | 2x4 ft. replacement lens (trims included)    |
| 2DBLTR48 ADSM LENS ASSEMBLY         | 2x4 ft. replacement lens (trims included)    |
| 2DBLTR48 SDSM LENS ASSEMBLY         | 2x4 ft. replacement lens (trims included)    |
| 2DBLTR48 ADPT LENS ASSEMBLY         | 2x4 ft. replacement lens (trims included)    |
| 2DBLTR48 SDPT LENS ASSEMBLY         | 2x4 ft. replacement lens (trims included)    |
| 2DBLTR48 ADSMT LENS ASSEMBLY        | 2x4 ft. replacement lens (trims included)    |
| 2DBLTR48 SDSMT LENS ASSEMBLY        | 2x4 ft. replacement lens (trims included)    |
| 2DBLTR48 ADPT SENSOR LENS ASSEMBLY  | 2x4 ft. replacement lens (trims included)    |
| 2DBLTR48 SDPT SENSOR LENS ASSEMBLY  | 2x4 ft. replacement lens (trims included)    |
| 2DBLTR48 ADSMT SENSOR LENS ASSEMBLY | 2x4 ft. replacement lens (trims included)    |
| 2DBLTR48 SDSMT SENSOR LENS ASSEMBLY | 2x4 ft. replacement lens (trims included)    |
| U10530A                             | 2x4 ft. replacement troffer trim strip       |
| RK8BDP 2P U                         | Disconnect Plug (BDP), 2 Pole, Package of 1  |
| RK8BDP 3P U                         | Disconnect Plug (BDP), 3 Pole, Package of 1  |
| RK8BDP 2P J10                       | Disconnect Plug (BDP), 2 Pole, Package of 10 |
| RK8BDP 2P J40                       | Disconnect Plug (BDP), 2 Pole, Package of 40 |