

## DIGITAL NAVIGATION

Ordering Tree nLight Platform Sensor Switch JOT Photometrics Performance Data

## FEATURES & SPECIFICATIONS

**INTENDED USE** — The BLT Best-in-Value Low Profile LED luminaire features a popular center basket design that offers a clean, versatile style and volumetric distribution. High efficacy LED light engines deliver energy savings and low maintenance compared to traditional sources. An extensive selection of configurations and options make the BLT the perfect choice for many lighting applications including schools, offices and other commercial spaces, retail, hospitals and healthcare facilities. The low profile BLT design (2-3/8") also makes it an excellent choice for renovation projects.

**CONSTRUCTION** — Prior to fabrication, BLT components are coated with a proprietary paint blend and die-formed for dimensional consistency.

The BLT reflector is available in both smooth and ribbed finishes. Choose RB from the fixture style section below for a ribbed finish.

End plates contain easy-to-position integral T-bar clips for securely attaching the luminaire to the T-grid. For additional T-grid security, optional screw on T-bar clips are available.

Diffusers are extruded from impact modified acrylic for increased durability.

LED boards and drivers are accessible from the plenum.

**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. A typically configured 2BLT2 features a **Unified Glare Rating (UGR)** starting at 18, UGR data available on page 8. High performance extruded acrylic diffusers conceal LEDs and efficiently deliver light in a volumetric distribution. Five diffuser choices available - curved and square designs with ribbed or a smooth frosted finish.

**ELECTRICAL** — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. 80% LED lumen maintenance at 60,000 hours (L80/60,000). Color Variation within 3-step MacAdam ellipse (3SDCM).

**Non-Configurable BLT:** Generic 0-10 volt dimming driver. Dims to 10%

**Configurable BLT:** available in High Efficiency (HE) versions for applications where a lower wattage (over the standard product) is required. The High Efficiency versions deliver >130 LPW and can be specified via the Lumen Package designations in the Ordering Information below.

eldoLED driver options deliver choice of dimming range, and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Optional integrated nLight® controls make each luminaire addressable - allowing them to digitally communicate with other nLight enabled controls such as dimmers, switches, occupancy sensors and photocontrols. Connection to nLight is simple. It can be accomplished with integrated nLight AIR wireless r10 and rES7 sensors, or through standard Cat-5 cabling. nLight offers unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission. nLight AIR is commissioned easily through an intuitive model app.

**Lumen Management:** Unique lumen management system (option N80) provides on board intelligence that actively manages the LED light source so that constant lumen output is maintained over the system life, preventing the energy waste created by the traditional practice of over-lighting.

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

**SENSOR—Integrated sensor (individual control):** Sensor Switch 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 4 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 4 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 a 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 4 for more details on the Integrated Smart Sensor.

**Integrated Wireless Sensor (single room control):** Sensor Switch 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** — The BLT's low profile design of only 2-3/8" provides increased installation flexibility especially in restrictive plenum applications. Designed for use in NEMA standard Type G (1" & 15/16"), NFG (9/16"), and SS (9/16") grid ceilings. Consult factory about other ceiling types.

For recessed mounting in hard ceiling applications, Drywall Grid Adapters (DGA) are available as an accessory. See Accessories section. Suitable for damp location.

**LISTINGS** — CSA Certified to meet U.S. and Canadian standards. IC rated. Tested in accordance with ISO 14644-1; suitable for use in ISO 5-9 positive and negative pressure clean rooms.

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.

**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](http://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](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           |

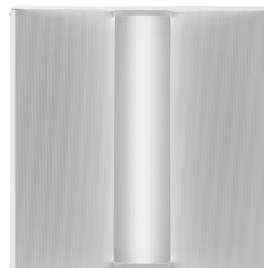
BLT Series LED

# 2BLT2

2' x 2'  
LED



ADP Diffuser Option



Ribbed Reflector Option



eldoLED

BAA

BABA

### Specifications

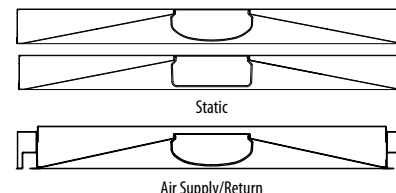
Length: 23-3/4 (60.3)

Width: 23-3/4 (60.3)

Depth: 2-3/8 (6.0)

Depth with Air supply/return: 2-3/4 (6.9)

All dimensions are inches (centimeters) unless otherwise specified.



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

### Now



User-friendly install



Enhanced energy savings



Code compliance

### Tomorrow



Scalability



Space configuration



Future-ready

## 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 when used with Acuity Brands controls products.

*All configurations of this luminaire are calibrated and tested to meet the Acuity Brands' specifications for chromatic consistency — including color rendering, color fidelity, and color temperature tolerance around standard CIE chromaticity coordinates.*

To learn more about Acuity A+ standards, specifications, and testing visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).



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

# 2BLT Volumetric Recessed Lighting 2'x2'



Design Select options indicated by this color background.

## ORDERING INFORMATION

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

**Example:** 2BLT2 33L ADP EZ1 LP835

| 2BLT2         |   |   |  |  |   |   |  |
|---------------|---|---|--|--|---|---|--|
| Series        | Fixture Style                                   | Air function                            | Lumens ‡   |  | Diffuser  | Voltage   | Driver   |
| 2BLT2 2X2 BLT | (blank) Smooth Reflector<br>RB Ribbed Reflector | (blank) Static<br>A Air supply/return ‡ | <b>Standard efficiency ‡ (&gt;125 LPW)</b><br>20L 2000<br>33L 3300<br>40L 4000<br>48L 4800 | <b>High efficiency ‡ (&gt;130 LPW)</b><br>20LHE 2000<br>33LHE 3300<br>40LHE 4000<br>48LHE 4800 | ADP Curved, ribbed<br>ADSM Curved, smooth<br>SDP Square, ribbed<br>SDSM Square, smooth<br>LUGR Low UGR lens ‡<br><b>Includes trim rings to match sensed version</b><br>ADPT Curved, ribbed<br>ADSMT Curved, smooth<br>SDPT Square, ribbed<br>SDSMT Square, smooth<br>LUGRT Low UGR lens with trim ‡ | (blank) MVOLT<br>120 120V<br>277 277V<br>347 347V ‡ | EZ1 eldoLED dims to 1% (0-10 volt dimming)<br>GZ1 Dims to 1% (0-10V dimming)<br>GZ10 Dims to 10% (0-10V dimming)<br>SLD Step-level dimming ‡                                     |
|               |   |   |  |  |   |   | LP830 82CRI, 3000 K<br>LP835 82CRI, 3500 K<br>LP840 82CRI, 4000 K<br>LP850 82CRI, 5000 K<br>LP930 90CRI, 3000K<br>LP935 90CRI, 3500K<br>LP940 90CRI, 4000K<br>LP950 90CRI, 5000K |

| nLight Interface   | Control ‡  |
|--|--|
| <b>nLight Wired</b><br>(blank) no nLight® interface<br>N80 nLight with 80% lumen management<br>N80EMG nLight with 80% lumen management For use with generator supply EM power ‡<br>N100 nLight without lumen management<br>N100EMG nLight without lumen management For use with generator supply EM power ‡<br><b>nLight Wireless</b><br>(blank) no nLight® interface<br>NLTAIR2 nLight AIR Generation 2 enabled ‡ | <b>nLight Wired</b><br>(blank) No sensor control<br>NES7 nLight™ nES 7 PIR integral occupancy sensor ‡<br>NESPDT7 nLight™ nES PDT 7 dual technology integral occupancy control ‡<br>NES7ADCX nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell ‡<br>NESPDT7ADCX nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell ‡<br><b>nLight Wireless</b><br>RES7 nLight AIR control with PIR integral occupancy sensor and automatic dimming photocell ‡<br>RES7PDT nLight AIR control with PDT dual technology integral occupancy sensor and automatic dimming photocell ‡<br>RIO nLight AIR radio module without sensor ‡<br>RES7EM nLight AIR PIR integral occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection ‡<br>RES7PDTEM nLight AIR microphonics dual technology occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection ‡<br>RIOEM nLight AIR radio module less sensor, with UL924 Emergency Operation, via power interrupt detection ‡ |
|  | <b>Individual Control</b><br>MSD7ADCX PIR integral occupancy sensor with automatic dimming control photocell ‡<br>MSDPDT7ADCX PDT integral occupancy sensor with automatic dimming control photocell ‡<br>JOT Wireless room control with "Just One Touch" pairing ‡<br>JOTVTX15 Wireless occupancy sensor with "Just One Touch" pairing ‡  |

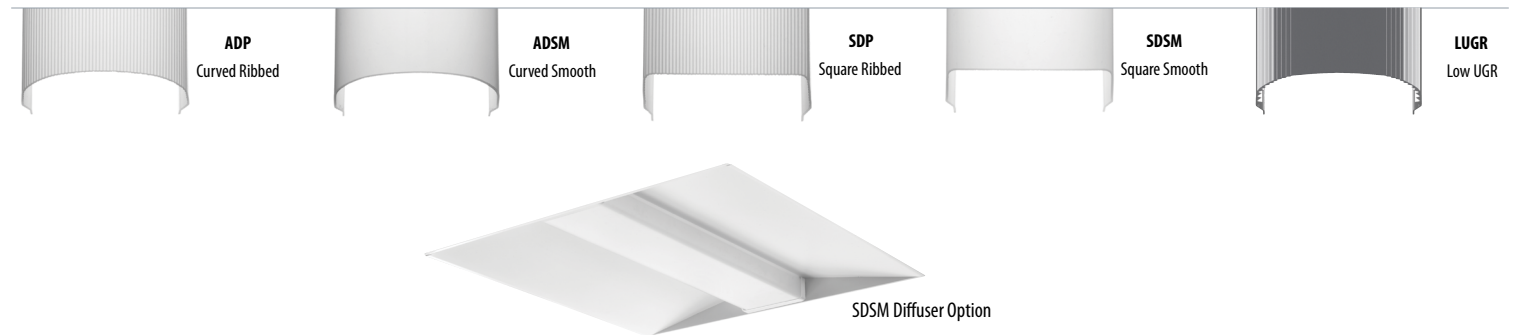
| Standby Mode                        | Options  |
|-------------------------------------|--|
| NOC NOC Occupancy sensor disabled ‡ | <div> <b>BDP Disconnect Plug</b><br/>           EL7L 700 lumen battery pack (Noncompliant with CA T20) ‡<br/>           EL14L 1400 lumen battery pack (Noncompliant with CA T20) ‡<br/>           E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS ‡<br/>           E10WSTAR Emergency battery pack, Enabled with STAR ‡         </div> <div>           CP Chicago plenum ‡<br/>           BGTD Bodine Generator Transfer Device ‡<br/>           PWS1836 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit<br/>           PWS1846 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuit<br/>           PWS1846 PWSLV Two cables: one 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge ‡<br/>           PWS1856LV 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/ low voltage wires ‡         </div> <div>           GLR Fast-blowing fuse ‡<br/>           GMF Slow-blowing fuse ‡<br/>           NPLT Narrow pallet<br/>           RRL_ RELOC®-ready luminaire ‡<br/>           LATC Earthquake clip<br/> <b>WH Glossy White</b><br/>           DWAM Anti-Microbial paint<br/> <b>JP28 Job packaging ‡</b><br/> <b>JP44 Job packaging ‡</b><br/>           IPSX Gasketed diffuser compartment to meet IPSX rating ‡<br/>           BAA Buy America(n) Act and/or Build America Buy America Qualified         </div> |

NOTE: ‡ indicates option value has ordering restrictions. Please reference the Option Value Ordering Restrictions chart on the next page. Options are sorted alphabetically.

## 2BLT Volumetric Recessed Lighting 2'x2'

| ± Option Value Ordering Restrictions |  |
|--------------------------------------|--|
| Option value                         | Restriction  |
| 347                                  | Not available with SLD, EL7L, EL14L, or E10WLCP options.   |
| A                                    | Not available with RB fixture style, consult factory for air flow data. If a job pack is selected, use JP28 only.  |
| BGTD                                 | Not available with JOT, JOTVTX15 sensor options or emergency battery options. Must specify voltage. Requires BSE labeling, voltage specific. Example: BGTD BSE10.  |
| Control                              | Must specify diffuser with trim rings.   |
| CP                                   | Not available with N80, N80EMG, N100, N100EMG, PWS1836, PWS1846, PWS1846 PWSLV or PWS1856LV.   |
| E10WSTAR                             | Not compatible with 347V.  |
| EL7L, EL14L, E10WLCP                 | When using pre-wire option, use PWS1846 or PWS1846 PWSLV.  |
| GLR, GMF                             | Must specify voltage. 120 or 277, with GLR and GMF fusing.   |
| IP5X                                 | Not available with air supply/return or Wired Networking (NES_) and Individual Control (MSD_) sensors.   |
| JOT, JOTVTX15                        | Not available with SLD, nLight, NLTAIR2, NOC, or BGTD options.   |
| JP28                                 | Only available with options: NES7, NESPDT7, NES7ADCX, NESPDT7ADCX, MSD7ADCX, MSDPDT7ADCX, RES7, RES7PDT, RIO, JOT, JOTVTX15. Not available when sensor options combined with 'A' air supply return option.                                 |
| JP44                                 | Not available with NES7, NESPDT7, NES7ADCX, NESPDT7ADCX, MSD7ADCX, MSDPDT7ADCX, RES7, RES7PDT, RIO, JOT, JOTVTX15. Not available 'A' air supply return option. Not available with battery and PWS together.                                |
| Lumens                               | Approximate lumen output. For high Efficiency, all versions may not achieve 130+ LPW. Refer to photometry on www.acuitybrands.com. Air supply/return option, 90 CRI, and versions with integral sensor trim rings may not achieve 130 LPW. |
| LUGR, LUGRT                          | Due to the unique optics used to drive the low UGR distribution, the LUGR lens is not uniformly lit and presents visible striping.   |
| MSD7ADCX, MSDPDT7ADCX                | Only available with EZ1 driver option. 0-10v dimming wires not accessible via access plate.  |
| NES7, NESPDT7, NES7ADCX, NESPDT7ADCX | Requires N80, N80EMG, N100, or N100EMG. Only available with EZ1 driver.  |
| NLTAIR2                              | Must order with nLight Wireless option from Control section. Not available with GZ10 driver.   |
| NOC                                  | Can only be ordered in conjunction with EZ1 or GZ1, NLTAIR2, RES7/RES7PDT. Occupancy sensor disabled at factory but can be re-enabled upon commissioning.  |
| N80EMG, N100EMG                      | nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.   |
| PWS1846 PWSLV, PWS1856LV             | Not available with nLIGHT wired network or individual controls   |
| RES7, RES7PDT, RIO                   | See UL 924 Sequence of Operation chart 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.   |
| RES7EM, RES7PDTEM, RIOEM             | See UL924 Sequence of Operation chart on page 3. Not available with GZ10 or GZ1 driver.  |
| RRL                                  | For ordering logic consult: RRL_2013.  |
| SLD                                  | Not available with any nLight Interface or Control options.  |

### Multiple Diffuser Options

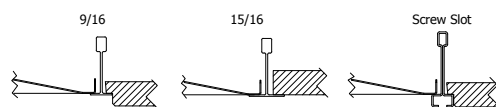


### Non-Configurable BLT

| Stock/MTO | Catalog Description *     | UPC          | Lumens | Wattage | LPW    | Color Temperature | Voltage | Pallet Qty |
|-----------|---------------------------|--------------|--------|---------|--------|-------------------|---------|------------|
| Stock     | 2BLT2 33L ADP LP835       | 190887529708 | 3332   | 26.67   | 124.92 | 3500K/82 CRI      | 120-277 | 56         |
|           | 2BLT2 33L ADP LP840       | 190887529739 | 3385   | 26.67   | 126.91 | 4000K/82CRI       | 120-277 | 56         |
|           | 2BLT2 33L ADP EL14L LP835 | 190887529890 | 3332   | 26.67   | 124.92 | 3500K/82CRI       | 120-277 | 56         |
|           | 2BLT2 33L ADP EL14L LP840 | 190887529937 | 3385   | 26.67   | 126.91 | 4000K/82CRI       | 120-277 | 56         |

\*Generic 0-10V Dimming to 10%.

| MOUNTING DATA                   |                       |
|---------------------------------|-----------------------|
| Ceiling Type                    | Appropriate Trim Type |
| Exposed grid tee (1" and 9/16") | G                     |
| Concealed grid tee              | G                     |
| Plaster or plasterboard         | G*                    |



\*DGA accessory available to provide ceiling trim flange and fixture support for plaster or plasterboard ceiling. Recommended rough-in dimensions for DGA installation is 24-3/4" x 24-3/4" (Tolerance is +1/8", -0").

#### 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.

2BLT Volumetric Recessed Lighting 2'x2'

Accessories & Replacement Parts

| Accessories: Order as separate catalog number. |   | Replacement Parts: Order as separate catalog number. |                                    |                        |
|--|---|--|------------------------------------|------------------------|
| DGA22  | Drywall grid adapter for 2x2 recessed fixture | *247WJV  | 2DBLT24 ADP LENS ASSEMBLY          | 2 ft. replacement lens |
| 2X2SMKSH PAF                                   | Surface Mount Troffer Kit Post Paint          | *249P2P  | 2DBLT24 SDP LENS ASSEMBLY          | 2 ft. replacement lens |
| RK8BDP 2P U                                    | Disconnect Plug (BDP), 2 Pole, Package of 1   | *249P2W  | 2DBLT24 ADSM LENS ASSEMBLY         | 2 ft. replacement lens |
| RK8BDP 3P U                                    | Disconnect Plug (BDP), 3 Pole, Package of 1   | *249P32  | 2DBLT24 SDSM LENS ASSEMBLY         | 2 ft. replacement lens |
| RK8BDP 2P J10                                  | Disconnect Plug (BDP), 2 Pole, Package of 10  | *237LT1  | 2DBLT24 ADPT LENS ASSEMBLY         | 2 ft. replacement lens |
| RK8BDP 2P J40                                  | Disconnect Plug (BDP), 2 Pole, Package of 40  | *237LT3  | 2DBLT24 SDPT LENS ASSEMBLY         | 2 ft. replacement lens |
|  |   | *237LT5  | 2DBLT24 ADSMT LENS ASSEMBLY        | 2 ft. replacement lens |
|  |   | *237LT7  | 2DBLT24 SDSMT LENS ASSEMBLY        | 2 ft. replacement lens |
|  |   | *237LT9  | 2DBLT24 ADPT SENSOR LENS ASSEMBLY  | 2 ft. replacement lens |
|  |   | *237M4Y  | 2DBLT24 SDPT SENSOR LENS ASSEMBLY  | 2 ft. replacement lens |
|  |   | *237M57  | 2DBLT24 ADSMT SENSOR LENS ASSEMBLY | 2 ft. replacement lens |
|  |   | *237M5H  | 2DBLT24 SDSMT SENSOR LENS ASSEMBLY | 2 ft. replacement lens |

Emergency Battery Pack Options - Field Installable

| Battery Model Number               | Wattage | Runtime (Minutes) | Lumen Output* @ 120 Lumens/Watt | Other   |
|------------------------------------|---------|-------------------|---------------------------------|---|
| <a href="#">ILB CP07 2H A</a>      | 7W      | 120               | 840                             | Storm Shelter/ 2-hour Runtime                                   |
| <a href="#">ILB CP10 A</a>         | 10W     | 90                | 1200                            |   |
| <a href="#">ILB CP10 HE AELR A</a> | 10W     | 90                | 1200                            | Title 20; Enabled with Self Testing, Automated Reporting (STAR) |
| <a href="#">ILBLP CP10 HE SD A</a> | 10W     | 90                | 1200                            | Title 20, Self Diagnostic                                       |
| <a href="#">ILBLP CP15 HE SD A</a> | 15W     | 90                | 1800                            | Title 20, Self Diagnostic                                       |
| <a href="#">ILB CP20 HE A</a>      | 20W     | 90                | 2400                            | Title 20  |
| <a href="#">ILB CP20 HE SD A</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 [techsupport@iotaengineering.com](mailto:techsupport@iotaengineering.com) for any Emergency Battery related questions.




| 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!**

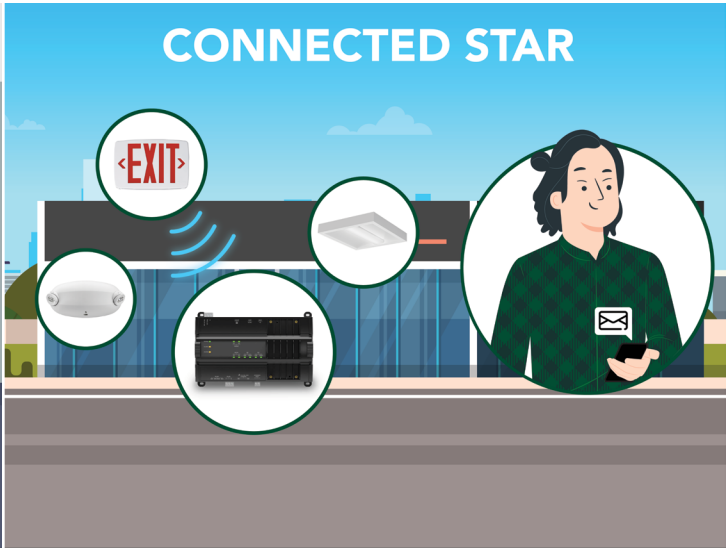
**Life Safety Code NFPA 101 testing and reporting requirements for emergency lighting include:**

-  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



**MOBILE STAR**

For small scale applications



**CONNECTED STAR**

For large scale applications

# 2BLT Volumetric Recessed Lighting 2'x2'

## JOT Wireless



### Sensor Switch JOT Enabled Wireless Solution

*Designed with contractors in mind, the Sensor Switch 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.



BLT Series



Sensor Switch  
WSXA JOT



BLT Series  
with integrated  
JOT OCC  
Sensors



Sensor Switch  
SPODMRA JOT



# 2BLT Volumetric Recessed Lighting 2'x2'

## 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

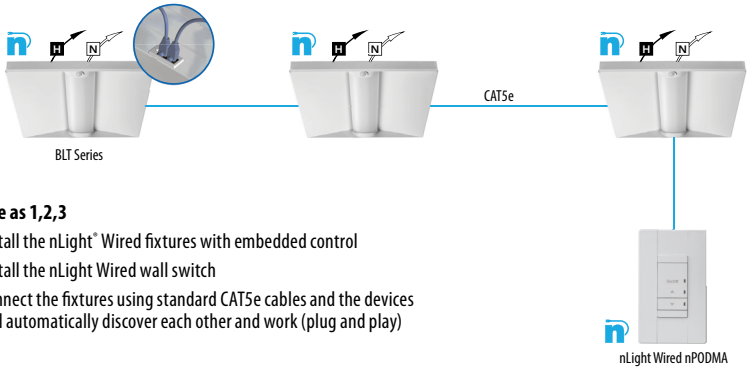


### Simple as 1,2,3

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



## nLight Wired Networking



### Simple as 1,2,3

1. Install the nLight® Wired fixtures with embedded control
2. Install the nLight Wired wall switch
3. Connect the fixtures using standard CAT5e cables and the devices will automatically discover each other and work (plug and play)

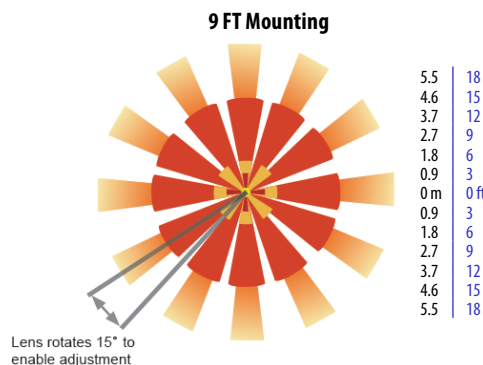


## 2BLT Volumetric Recessed Lighting 2'x2'

| 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                       |                       |
| NESPD7         |                             |                   | X   | X                       |                       |
| NESPD7ADCX     | 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

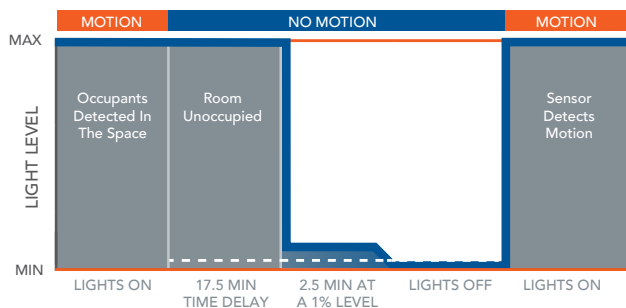
nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and nLight AIR is available with or without an integral sensor. The integrated rES7 or rES7PDT smart sensors are part of each luminaire in the nLight AIR network, which can be 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 nES 7 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.

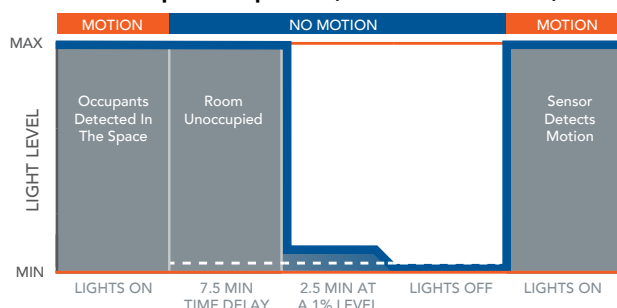
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the nESPD7ADCX includes an integrated photocell, which enables daylight harvesting controls which is ideal for areas where windows are present.

### Sequence of Operation (MSD7 Sensor)



\*The presetting on the automatic dimming photocell is 5fc.

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



\*The presetting on the automatic dimming photocell is 5fc (NES7) and 10fc (RES7).



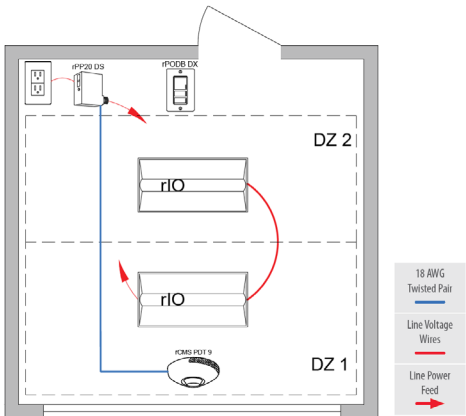
2BLT Volumetric Recessed Lighting 2'x2'

Controls Accessories

| nLight® Wired Control Accessories:<br><i>Order as separate catalog number. Visit <a href="http://www.acuitybrands.com/products/controls/nlight">www.acuitybrands.com/products/controls/nlight</a>.</i> |                     |  |                            |
|--|---------------------|--|----------------------------|
| <b>WallPod stations</b>  | <b>Model number</b> | <b>Occupancy sensors</b>                     | <b>Model number</b>        |
| 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]     |
| <b>Photocell controls</b>  | <b>Model number</b> | <b>Cat-5 cable (plenum rated)</b>            | <b>Model number</b>        |
| Full range dimming   | nCM ADCX RJB        | 10' cable                                    | CAT5 10FT J1               |
|  |                     | 30' cable                                    | CAT5 30FT J1               |

| nLight® AIR Control Accessories:<br><i>Order as separate catalog number. Visit <a href="http://www.acuitybrands.com/products/controls/nlightair">www.acuitybrands.com/products/controls/nlightair</a>.</i> |                         |
|--|-------------------------|
| <b>Wall switches</b>   | <b>Model number</b>     |
| 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 |

BLT 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.



| rCMS¹              |  |               |                                 |                     |   |                 |                                   |                |                            | Example: RCMS PDT 10 AR G2 |                            |
|--------------------|--|---------------|---------------------------------|---------------------|---|-----------------|-----------------------------------|----------------|----------------------------|----------------------------|----------------------------|
| Series / Detection |  | Power Supply¹ |                                 | Occupancy Detection |   | Lens (Required) |                                   | Operating Mode |                            | Generation                 |                            |
| RCMS               | nLight AIR occupancy and daylight sensor | [blank]       | Power Supply ordered separately | [blank]             | PIR Detection<br>PDT Dual Tech PIR/<br>Microphonics | 10              | Large Motion/ Extended Range 360° | [BLANK]        | None<br>AR Auxiliary Relay | G2                         | Generation 2 compatibility |
|                    |  | PS 150        | Standard 150 mA Power Supply    |                     |   | 9               | Small Motion/ Extended Range 360° |                |                            |                            |                            |
|                    |  |               |                                 |                     |   | 6               | High Bay 360° Lens                |                |                            |                            |                            |

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



Sensor Switch  
WSX



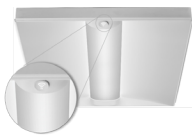
nLight WIRED  
NPOD UNITOUCH



nLight WIRED  
nPODMA DX



nLight AIR  
rPODBA



BLT with rIO



rPODBA

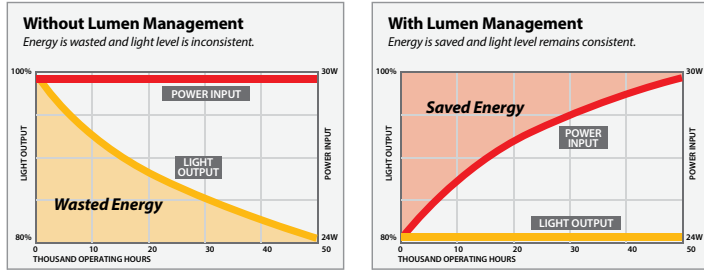


RCMS

# 2BLT Volumetric Recessed Lighting 2'x2'

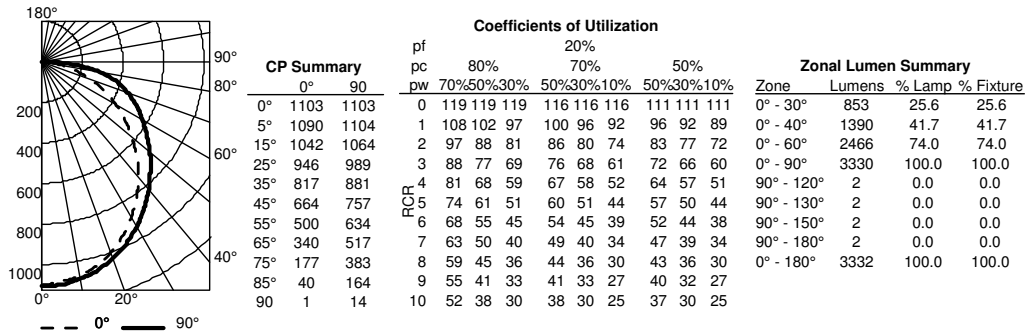
## Constant Lumen Management

Enabled by the embedded nLight control, the BLT actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.

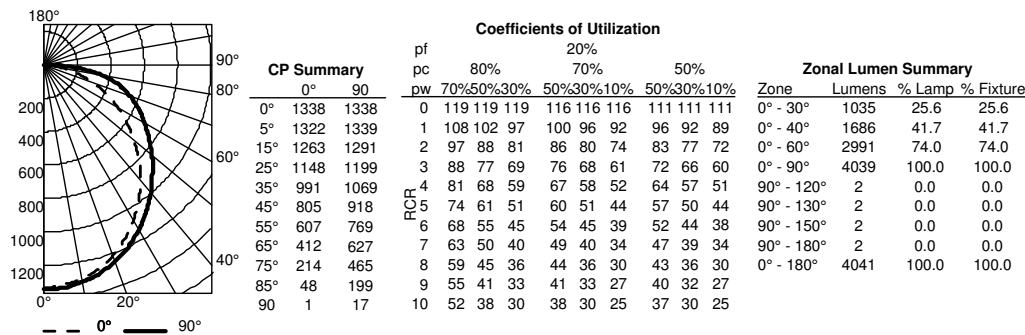


## PHOTOMETRICS

2BLT2 33L ADP LP835, 3332 delivered lumens, test no. ISF36900P19, tested in accordance to IESNA LM-79



2BLT2 40L ADP LP835, 4041 delivered lumens, test no. ISF36900P35, tested in accordance to IESNA LM-79



## UNIFIED GLARE RATING (UGR)

| Lumen Package  | UGR Values of BLT 2x2 @ 80CRI and 3500K<br>UGR (70% 50% 20% reflectance using a 4H x 8H room size) |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |
|--|--|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
|  | ADP  |         | ADPT      |         | ADSM      |         | ADSMT     |         | SDP       |         | SDPT      |         | SDSM      |         | SDSMT     |         | LUGR      |         | LUGRT     |         |
|  | Crosswise  | Endwise | Crosswise | Endwise | Crosswise | Endwise | Crosswise | Endwise | Crosswise | Endwise | Crosswise | Endwise | Crosswise | Endwise | Crosswise | Endwise | Crosswise | Endwise | Crosswise | Endwise |
| 20L  | 17.8   | 21.6    | 17.8      | 21.8    | 17.7      | 21.4    | 18        | 21.1    | 18.3      | 21.3    | 18        | 21      | 18.1      | 21.5    | 18        | 20.9    | 16.3      | 17.9    | 17.6      | 18.2    |
| 20LHE  | 17.6   | 21.5    | 17.6      | 21.6    | 19.5      | 22.8    | 17.6      | 21.5    | 17.8      | 21.4    | 17.6      | 21.5    | 17.9      | 21.3    | 17.9      | 21.4    | 16.1      | 17.7    | 17.4      | 18      |
| 33L  | 19.5   | 23.3    | 19.5      | 22.8    | 19.9      | 23.2    | 19.3      | 22.4    | 19.6      | 22.6    | 19.3      | 22.3    | 19.6      | 22.3    | 19.4      | 22.2    | 18        | 19.6    | 19.3      | 19.8    |
| 33LHE  | 19.7   | 23.3    | 19.7      | 23.1    | 20.5      | 23.7    | 19.7      | 22.8    | 20        | 23      | 19.7      | 22.7    | 19.8      | 23.2    | 19.8      | 22.6    | 17.9      | 19.5    | 19.2      | 19.8    |
| 40L  | 20.2   | 24      | 20.3      | 23.7    | 20.5      | 23.8    | 20.2      | 24      | 20.5      | 23.5    | 20.2      | 23.2    | 20.5      | 23.2    | 20.3      | 23.2    | 18.7      | 20.3    | 20        | 20.5    |
| 40LHE  | 20.2   | 24.1    | 20.3      | 23.7    | 20.9      | 24.6    | 20.2      | 23.4    | 20.5      | 23.5    | 20.2      | 23.3    | 20.5      | 23.2    | 20.3      | 23.2    | 18.7      | 20.3    | 20        | 20.5    |
| 48L  | 20.8   | 24.6    | 20.7      | 24.8    | 20.9      | 24.6    | 20.8      | 24.6    | 21        | 24.5    | 20.7      | 24.6    | 21        | 24.5    | 21        | 24.5    | 19.4      | 21.1    | 20.7      | 21.3    |
| 48LHE  | 20.7   | 24.3    | 20.7      | 24.1    | 20.9      | 24.2    | 20.8      | 24.6    | 21        | 24      | 20.7      | 23.7    | 20.9      | 23.7    | 20.8      | 23.6    | 19.4      | 21      | 20.7      | 21.2    |
| UGR varies based on luminaire options and is affected by application dependent parameters. Numbers depicted here are considered "Luminaire-UGR and/or "Point-UGR" values.<br>To determine a more precise maximum UGR value ("Application-UGR"), a full lighting design layout should be completed with the selected luminaire configuration for each application |  |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |

# 2BLT Volumetric Recessed Lighting 2'x2'

| Performance Data                     |        |       |       |             |          |
|--------------------------------------|--------|-------|-------|-------------|----------|
| Model Number                         | Lumens | LPW   | Watts | DLC Listing | DLC ID   |
| 2BLT2 20L ADP EZ1 (GZ1, GZ10) LP840  | 2092   | 127.8 | 16.4  | Premium     | PM92196A |
| 2BLT2 20L ADP EZ1 (GZ1, GZ10) LP835  | 2036   | 124.4 | 16.4  | Premium     | P6445UVD |
| 2BLT2 20L ADPT EZ1 (GZ1, GZ10) LP840 | 2061   | 125.9 | 16.37 |             |          |
| 2BLT2 20L ADPT EZ1 (GZ1, GZ10) LP835 | 2008   | 122.7 | 16.37 |             |          |
| 2BLT2 33L ADP EZ1 (GZ1, GZ10) LP835  | 3300   | 124.6 | 26.5  | Premium     | PHSXHE8F |
| 2BLT2 33L ADP EZ1 (GZ1, GZ10) LP840  | 3391   | 128.1 | 26.5  | Premium     | PD18CKQ8 |
| 2BLT2 33L ADPT EZ1 (GZ1, GZ10) LP840 | 3343   | 126.3 | 26.5  | Premium     | PF98CZ2H |
| 2BLT2 33L ADPT EZ1 (GZ1, GZ10) LP835 | 3254   | 122.9 | 26.5  | Premium     | S-0IDCZL |
| 2BLT2 40L ADP EZ1 (GZ1, GZ10) LP835  | 4034   | 130.2 | 31    | Premium     | P1XWW9GV |
| 2BLT2 40L ADP EZ1 (GZ1, GZ10) LP840  | 4144   | 133.8 | 31    | Premium     | PHCQ2CQF |
| 2BLT2 40L ADPT EZ1 (GZ1, GZ10) LP835 | 3977   | 128.4 | 31    | Premium     | PW6RMMJ4 |
| 2BLT2 40L ADPT EZ1 (GZ1, GZ10) LP840 | 4086   | 131.9 | 31    | Premium     | PSYYDAA8 |
| 2BLT2 48L ADP EZ1 (GZ1, GZ10) LP835  | 5022   | 117.2 | 42.9  | Standard    | PJRH1R1G |
| 2BLT2 48L ADP EZ1 (GZ1, GZ10) LP840  | 5159   | 120.4 | 42.9  | Standard    | P8G93YOK |
| 2BLT2 48L ADPT EZ1 (GZ1, GZ10) LP835 | 4951   | 115.5 | 42.9  | Standard    | PITU3V6X |
| 2BLT2 48L ADPT EZ1 (GZ1, GZ10) LP840 | 5087   | 118.7 | 42.9  | Standard    | P5X2XU76 |

DLC information is subject to change, for the most up-to-date information please refer to [www.dlc.org](http://www.dlc.org). Above listings do not cover 347v or SLD.

## How to Estimate Delivered Lumens in Emergency Mode

Use the formula below to estimate the delivered lumens in emergency mode

$$\text{Delivered Lumens} = 1.25 \times P \times \text{LPW}$$

P = Output power of emergency driver. P = 10W for E10WLCP option.

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet. LPW = Lumen per watt rating of the luminaire. LPW information available in Performance Data section.

| HE Performance Data                    |        |       |       |             |          |
|--|--------|-------|-------|-------------|----------|
| Model Number                           | Lumens | LPW   | Watts | DLC Listing | DLC ID   |
| 2BLT2 20LHE ADP EZ1 (GZ1, GZ10) LP835  | 1939   | 132.3 | 14.7  | Premium     | PUQCZNQI |
| 2BLT2 20LHE ADP EZ1 (GZ1, GZ10) LP840  | 1992   | 135.9 | 14.7  | Premium     | PJCZRW21 |
| 2BLT2 20LHE ADPT EZ1 (GZ1, GZ10) LP840 | 1964   | 134.0 | 14.7  | Premium     | PLC4RF4L |
| 2BLT2 33LHE ADP EZ1 (GZ1, GZ10) LP835  | 3247   | 133.0 | 24.4  | Premium     | PXXZN9PH |
| 2BLT2 33LHE ADP EZ1 (GZ1, GZ10) LP840  | 3336   | 136.7 | 24.4  | Premium     | PKPJYYRF |
| 2BLT2 33LHE ADPT EZ1 (GZ1, GZ10) LP835 | 3202   | 131.1 | 24.4  | Premium     | PZC8BZSS |
| 2BLT2 33LHE ADPT EZ1 (GZ1, GZ10) LP840 | 3290   | 134.7 | 24.4  | Premium     | PM5G8AFU |
| 2BLT2 40LHE ADP EZ1 (GZ1, GZ10) LP835  | 4044   | 135.5 | 29.9  | Premium     | PJ55XFFP |
| 2BLT2 40LHE ADP EZ1 (GZ1, GZ10) LP840  | 4155   | 139.2 | 29.9  | Premium     | PEGFHPZD |
| 2BLT2 40LHE ADPT EZ1 (GZ1, GZ10) LP835 | 3987   | 133.6 | 29.9  | Premium     | P8E16E9B |
| 2BLT2 40LHE ADPT EZ1 (GZ1, GZ10) LP840 | 4096   | 137.2 | 29.9  | Premium     | PFRSSSVG |
| 2BLT2 48LHE ADP EZ1 (GZ1, GZ10) LP835  | 4944   | 139.8 | 35.4  | Premium     | P558XUZP |
| 2BLT2 48LHE ADP EZ1 (GZ1, GZ10) LP840  | 5080   | 143.6 | 35.4  | Premium     | P1863H56 |
| 2BLT2 48LHE ADPT EZ1 (GZ1, GZ10) LP835 | 4875   | 137.8 | 35.4  | Premium     | PHPTG5M8 |
| 2BLT2 48LHE ADPT EZ1 (GZ1, GZ10) LP840 | 5009   | 141.6 | 35.4  | Premium     | PBKN954Z |

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