

**DIGITAL NAVIGATION**

Ordering Tree nLight Platform Sensor Switch Air 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 2BLT4 features a **Unified Glare Rating (UGR)** starting at 17, 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 it 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 RIO, 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 mobile 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.

**CONTROLS** — **Standalone Embedded Controls** — BLT is available with (wired or wireless) standalone embedded controls by SensorSwitch. A wired SensorSwitch or wireless SensorSwitch AIR (sensor and/or control device) can be embedded within this luminaire.

**Networked Embedded Controls** — BLT is available with (wired or wireless) networked embedded controls by nLight®, addressing requirements of Luminaire Level Lighting Controls (LLLC). A wired nLight or wireless nLight AIR (sensor and/or control device) can be embedded within this luminaire.

**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/OPL](http://www.designlights.org/OPL) 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**

**2BLT4**

2' x 4'  
LED



ADP Diffuser Option



Ribbed Reflector Option



*Specifications*

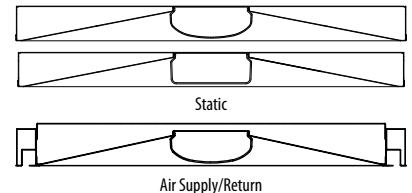
Length: 47-3/4 (121.2)

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' specifications for chromatic consistency – including color rendering, color fidelity, and color temperature tolerance around standard CIE chromaticity coordinates.

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.

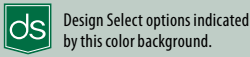
To learn more about Acuity A+ standards, specifications, and testing visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).



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'x4'



## ORDERING INFORMATION

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

**Example:** 2BLT4 40L ADP EZ1 LP840

2BLT4	Fixture Style	Air function	Lumens †	Diffuser	Voltage	Driver	Color temperature	
2BLT4 2x4 BLT	(blank) Smooth Reflector RB Ribbed Reflector	(blank) Static A Air supply/return †	<b>Standard efficiency (&gt;100 LPW)</b> 30L 3000 40L 4000 48L 4800 60L 6000 72L 7200 85L 8500 100L 10000 120L 12000	<b>High efficiency † (&gt;130 LPW)</b> 30LHE 3000 40LHE 4000 48LHE 4800 60LHE 6000 72LHE 7200 85LHE 8500	ADP Curved, ribbed ADSM Curved, smooth SDP Square, ribbed SDSM Square, smooth LUGR Low UGR lens † <b>Includes trim rings to match sensored version</b> ADPT Curved, ribbed ADSMT Curved, smooth SDPT Square, ribbed SDSMT Square, smooth LUGRT Low UGR lens with trim †	(blank) MVOLT 120 120V 277 277V 347 347V †	EZ1 eldoLED dims to 1% (0-10 volt dimming) GZ1 Dims to 1% (0-10V dimming) GZ10 Dims to 10% (0-10V dimming) SLD Step-level dimming †	LP830 82CRI, 3000 K LP835 82CRI, 3500 K LP840 82CRI, 4000 K LP850 82CRI, 5000 K LP930 90CRI, 3000K LP935 90CRI, 3500K LP940 90CRI, 4000K LP950 90CRI, 5000K

nLight Interface	Control †	Individual Control
<b>nLight Wired</b> (blank) no nLight® interface N80 nLight with 80% lumen management N80EMG nLight with 80% lumen management For use with generator supply EM power † N100 nLight without lumen management N100EMG nLight without lumen management For use with generator supply EM power † <b>nLight Wireless</b> (blank) no nLight AIR® interface NLTAIR2 nLight AIR Generation 2 enabled †	<b>nLight Wired †</b> (blank) No sensor control NES7 nLight™ nES 7 PIR integral occupancy sensor NESPDT7 nLight™ nES PDT 7 dual technology integral occupancy control NES7ADCX nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell NESPDT7ADCX nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell <b>nLight Wireless</b> RES7 nLight AIR control with PIR integral occupancy sensor and automatic dimming photocell † RES7PDT nLight AIR control with PDT dual technology integral occupancy sensor and automatic dimming photocell † RIO nLight AIR radio module without sensor † RES7EM nLight AIR PIR integral occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection † RES7PDTEM nLight AIR microphonics dual technology occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection † RIOEM nLight AIR radio module less sensor, with UL924 Emergency Operation, via power interrupt detection †	MSD7ADCX PIR integral occupancy sensor with automatic dimming control photocell † MSDPDT7ADCX PDT integral occupancy sensor with automatic dimming control photocell † SSAIR Wireless standalone embedded control by SensorSwitch † SSAIR APIR Wireless standalone embedded control by SensorSwitch with Passive Infrared Occ sensor with autodimming photocell †

Standby Mode	Options
NOC NOC Occupancy sensor disabled †	<b>BDP Disconnect Plug</b> EL7L 700 lumen battery pack (Noncompliant with CA T20) † EL14L 1400 lumen battery pack (Noncompliant with CA T20) † E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS † E10WSTAR Emergency battery pack, Enabled with STAR † CP Chicago plenum † BGTD Bodine Generator Transfer Device † PWS1836 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit PWS1846 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuit PWS1846 PWSLV Two cables: one 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge † PWS1856LV 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/ low voltage wires † GLR Fast-blowing fuse † GMF Slow-blowing fuse † NPLT Narrow pallet RRL_ RELOC®-ready luminaire † LATC Earthquake clip WH Glossy White DWAM Anti-Microbial paint JP14 Job packaging † JP22 Job packaging † IPSX Gasketed diffuser compartment to meet IPSX rating † BAA Buy America(n) Act and/or Build America Buy America Qualified

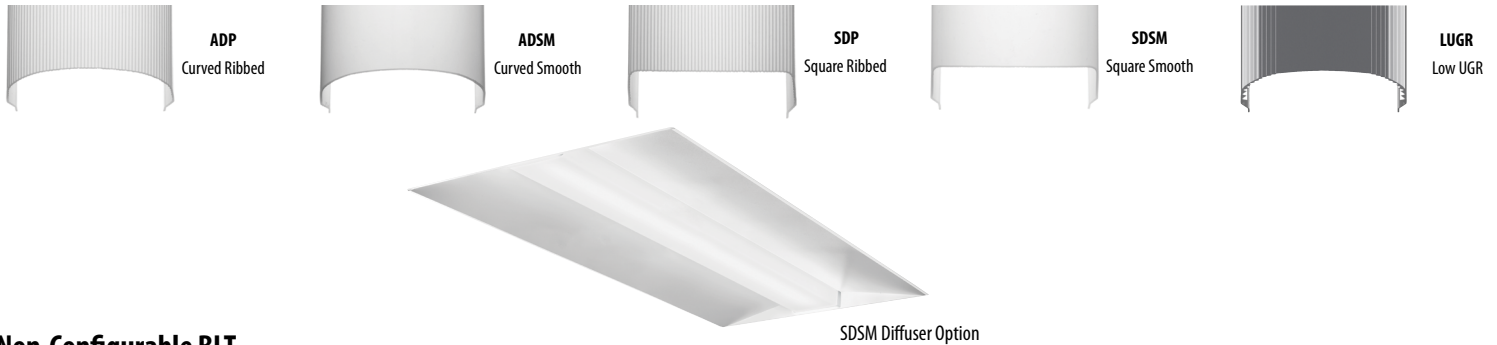
NOTE: † indicates option value has ordering restrictions. Please reference the Option Value Ordering Restrictions chart on the next page. Options are sorted alphanumerically.

# 2BLT Volumetric Recessed Lighting 2'x4'

## ‡ 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 JP14 only.
BGTD	Not available with TD, SSAIR, SSAIR APIR sensor options or emergency battery options. Must specify voltage. Requires BSE labeling, voltage specific. Example: BGTD BSE10.
Controls	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.
E10WLCP, EL7L, EL14L	When using pre-wire option, use PWS1846 or PWS1846 PWSLV.
FAO	EZ1 driver required. Not available with USPOM, FAO or lumen packages > 6000LM. FAO restricts use of external Dimming controls. See chart on page 3 for additional details.
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.
SSAIR, SSAIR APIR	Not available with standard efficiency 85L, 85LHE, 100L or 120L lumen options. Not available with SLD, nLight, NLTAIR2, NOC, or BGTD options.
JP14	Only available on fixtures with NES7, NESPDT7, NESPDT7ADCX, MSD7ADCX, MSPDPT7ADCX, RES7, RES7PDT, RIO, SSAIR, SSAIR APIR. Not available when 'A' air supply/return function and sensor options are combined.
JP22	Not available with option: NES7, NESPDT7, NESPDT7ADCX, MSD7ADCX, MSPDPT7ADCX, RES7, RES7PDT, RIO, SSAIR, SSAIR APIR. Not available when 'A' air supply/return function option.
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, MSPDPT7ADCX	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. Not available with 85L, 85LHE, 100L, or 120L options.
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, RES7PDDT, 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, RES7PDT, RIOEM	See UL924 Sequence of Operation chart on page 3. Not available with 72L, 72LHE, 85L or 85LHE lumen packages. Not available with GZ10 or GZ1 driver.
RRL_	For ordering logic consult: <a href="#">RRL_2013</a> .
SLD	Not available with any nLight Interface or Control options.

## Multiple Diffuser Options

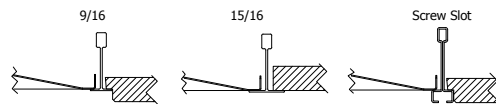


## Non-Configurable BLT

Non-Configurable BLT								
Stock/MTO	Catalog Description *	UPC	Lumens	Wattage	LPW	Color Temperature	Voltage	Pallet Qty
Stock	2BLT4 40L ADP LP835	00190887470789	4000	31.69	126.22	3500K/82 CRI	120-277	28
	2BLT4 40L ADP LP840	00190887470765	4063	31.69	128.23	4000K/82CRI	120-277	28
	2BLT4 46L ADP LP835	00190887468656	4960	38	130.5	3500K/82 CRI	120-277	28
	2BLT4 46L ADP LP840	00190887468649	5039.18	38	132.58	4000K/82CRI	120-277	28
	2BLT4 40L ADP EL14L LP835	00190887470925	4000	31.69	126.22	3500K/82 CRI	120-277	28
	2BLT4 40L ADP EL14L LP840	00190887470918	4063	31.69	128.23	4000K/82 CRI	120-277	28
	2BLT4 46L ADP EL14L LP835	00190887468670	4960	38	130.5	3500K/82 CRI	120-277	28
	2BLT4 46L ADP EL14L LP840	00190887468663	5039.18	38	132.58	4000K/82 CRI	120-277	28

\*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'x4'

## Accessories & Replacement Parts

Accessories: Order as separate catalog number.	
DGA24	Drywall grid adapter for 2x4 recessed fixture
2X4SMKSH PAF	Surface Mount Troffer Kit Post Paint
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

Replacement Parts: Order as separate catalog number.		
*249P2N	2DBLT48 ADP LENS ASSEMBLY	4 ft. replacement lens
*249P2T	2DBLT48 SDP LENS ASSEMBLY	4 ft. replacement lens
*249P30	2DBLT48 ADSM LENS ASSEMBLY	4 ft. replacement lens
*249P33	2DBLT48 SDSM LENS ASSEMBLY	4 ft. replacement lens
*237LT2	2DBLT48 ADPT LENS ASSEMBLY	4 ft. replacement lens
*237LT4	2DBLT48 SDPT LENS ASSEMBLY	4 ft. replacement lens
*237LT6	2DBLT48 ADSMT LENS ASSEMBLY	4 ft. replacement lens
*237LT8	2DBLT48 SDSMT LENS ASSEMBLY	4 ft. replacement lens
*237LTA	2DBLT48 ADPT SENSOR LENS ASSEMBLY	4 ft. replacement lens
*237MS2	2DBLT48 SDPT SENSOR LENS ASSEMBLY	4 ft. replacement lens
*237MSA	2DBLT48 ADSMT SENSOR LENS ASSEMBLY	4 ft. replacement lens
*237MSL	2DBLT48 SDSMT SENSOR LENS ASSEMBLY	4 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



## Performance You Can Count On

SensorSwitch™ offers standalone wired and wireless lighting controls solutions designed for room-based applications. Our products offer reliable performance and ease of installation.

[Sensorswitch.com](http://Sensorswitch.com)

### Wired Embedded Controls



BLT Series

1. Install the luminaires with embedded controls
2. Install and wire the wall switch to power.
3. Connect load and 0-10 dimming wires from the wall switch to the luminaires.



SensorSwitch  
WSXA D

### Wireless Embedded Controls



BLT Series

1. Install the luminaires with embedded controls
2. Insert the pairing tool into the pinhole on the wall switch; press and hold any button for 6 seconds.
3. Once paired, each fixture will individually dim down to 10% brightness. All products will be fully functional.



SensorSwitch  
WSXA JOT



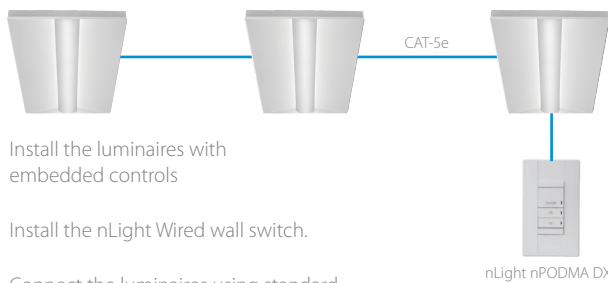
## Single Lighting Controls Platform for Indoor & Outdoor Spaces

nLIGHT® is your networked lighting controls platform, for indoor and outdoor applications, providing wired or wireless options. Scaling from room to campus-wide applications, it is the one platform that grows with your business today and tomorrow; to seamlessly address energy cost optimization, building code compliance, improved occupant comfort, and much more.

nLIGHT also interfaces with DALI®, BACnet®, DMX and additional third-party devices.

[nLIGHTcontrols.com](http://nLIGHTcontrols.com)

### Wired Embedded Controls



1. Install the luminaires with embedded controls
2. Install the nLight Wired wall switch.
3. Connect the luminaires using standard CAT-5e cables and the controls devices will automatically discover each other and work (plug and play).

### Wireless Embedded Controls



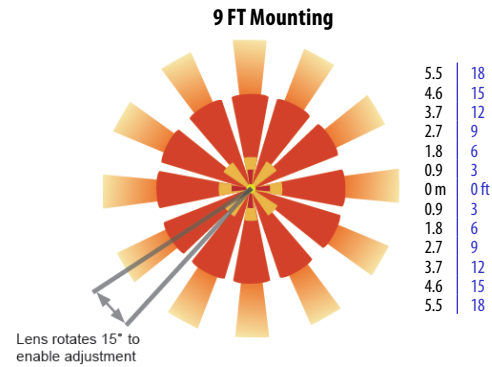
1. Install the luminaires with embedded controls
2. Install the nLight AIR battery-powered wall switch
3. Use **CLAIRITY** + mobile app to pair the fixture with the wall switch and if desired, customize the sensor settings

# 2BLT Volumetric Recessed Lighting 2'x4'

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



### Embedded Controls by SensorSwitch

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

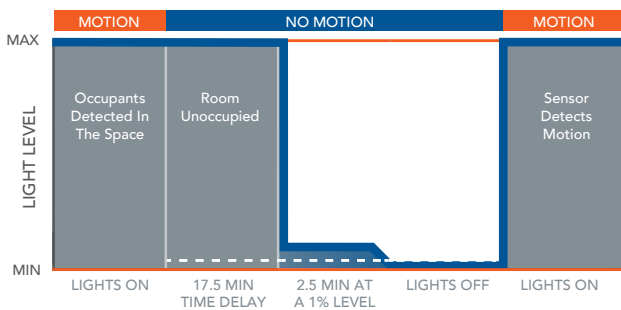
nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and nLight AIR is available with or without an integral sensor. The integrated rES7 or rES7PDT smart sensors are part of each luminaire in the nLight AIR network, which can be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

### A luminaire with a wired nLight sensor

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.

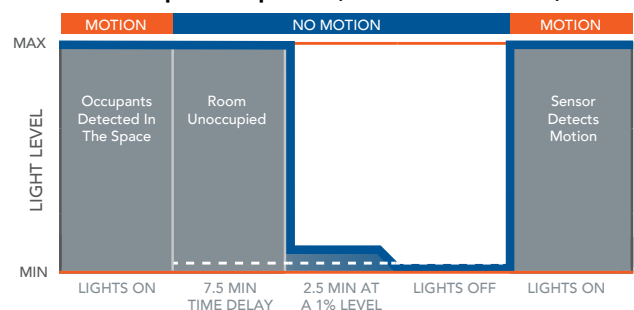
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the nESPD7ADCX includes an 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).



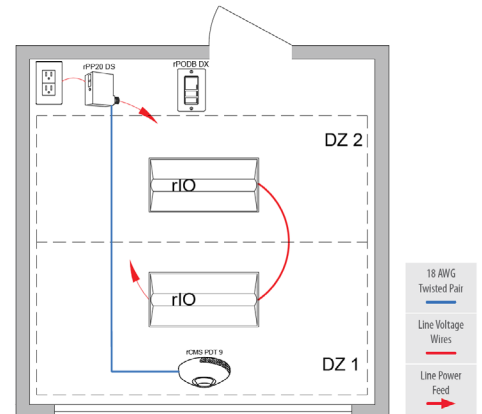
# 2BLT Volumetric Recessed Lighting 2'x4'

## Controls Accessories

<b>nLight® Wired Control Accessories:</b> <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

<b>nLight® AIR Control Accessories:</b> <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.



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 PS 150 Standard 150 mA Power Supply	[blank] PIR Detection PDT Dual Tech PIR/Microphonics	10 Large Motion/ Extended Range 360° 9 Small Motion/ Extended Range 360° 6 High Bay 360° Lens	[BLANK] None AR Auxiliary Relay	G2	Generation 2 compatibility	

**Notes**

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



Sensor Switch  
WSX



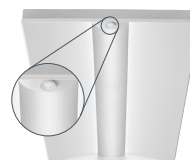
nLight WIRED  
NPOD UNITOUCH



nLight WIRED  
nPODMA DX



nLight AIR  
rPODBA



BLT with rIO



rPODBA

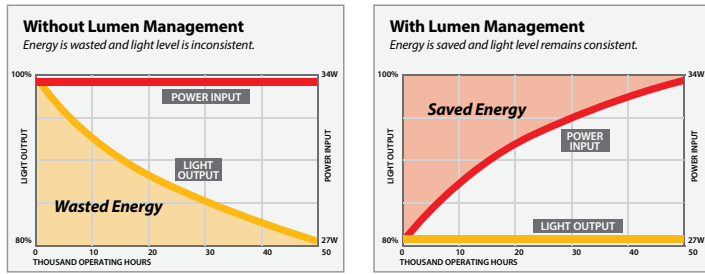


RCMS

# 2BLT Volumetric Recessed Lighting 2'x4'

## 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

Please click link to access [Photometry & Revit \(BIM\)](#)

## UNIFIED GLARE RATING (UGR)

Lumen Package	UGR Values of BLT 2x4 @ 80CRI and 3500K																			
	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
30L	16.7	20.5	16.6	20.7	16.8	20.5	16.7	20.5	16.9	20.4	16.6	20.5	16.9	20.4	16.9	20.4	17	17.2	16.8	17.4
30LHE	16.8	20.7	16.8	20.8	16.9	20.6	16.8	20.7	17	20.6	16.8	20.7	17.1	20.5	17.1	20.6	16.9	17.2	16.8	17.3
40L	17.7	21.5	17.7	21.7	17.8	21.5	17.7	21.5	17.8	21.4	17.7	21.6	18	21.4	18	21.5	17.9	18.2	17.8	18.3
40LHE	17.8	21.6	17.8	21.8	17.9	21.6	17.8	21.6	18	21.5	17.7	21.6	18.1	21.5	18	21.6	17.9	18.1	17.7	18.2
48L	18.5	22.3	18.4	22.5	18.5	22.3	18.5	22.3	18.7	22.2	18.4	22.3	18.7	22.1	18.7	22.2	18.6	18.8	18.4	18.9
48LHE	18.3	22.2	18.3	22.3	18.4	22.1	18.3	22.2	18.5	22.1	18.3	22.2	18.6	22	18.6	22.1	18.8	19.1	18.7	19.2
60L	19.1	23	19.1	23.1	19.2	22.9	19.1	23	19.3	22.9	19.1	23	19.4	22.8	19.4	22.9	19.2	19.5	19.1	19.6
60LHE	19.1	22.9	19	23.1	19.1	22.9	19.1	22.9	19.3	22.8	19	22.9	19.3	22.7	19.3	22.8	19.2	19.4	19	19.5
72L	19.8	23.6	19.7	23.8	19.9	23.6	19.8	23.6	20	23.5	19.7	23.6	20.1	23.5	20	23.5	19.9	20.2	19.8	20.3
72LHE	19.7	23.6	19.7	23.7	19.8	23.5	19.7	23.6	19.9	23.5	19.7	23.6	20	23.4	20	23.5	19.8	20.1	19.7	20.2
85L	20.4	24.2	20.3	24.4	20.4	24.1	20.4	24.2	20.6	24.1	20.3	24.2	20.6	24	20.6	24.1	20.4	20.7	20.3	20.8
85LHE	20.2	24	20.2	24.2	20.3	24	20.2	24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20.2	20.5	20.1	20.6
100L	20.8	24.7	20.8	24.8	20.9	24.6	20.8	24.7	21	24.6	20.8	24.7	21.1	24.5	21.1	24.6	20.9	21.2	20.7	21.3
120L	21.5	25.3	21.4	25.5	21.5	25.2	21.4	25.3	21.6	25.2	21.4	25.3	21.7	25.1	21.7	25.2	21.5	21.8	21.3	21.9

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. 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'x4'

Performance Data					
Model Number	Lumens	LPW	Watts	DLC Listing	DLC ID
2BLT4 30L ADP E21 (GZ1, GZ10) LP835 [All Options]	3188	141.56	22.5	Premium	PWJDEMHS
2BLT4 30L ADP E21 (GZ1, GZ10) LP840 [All Options]	3276	145.44	22.5	Premium	P18J5GLD
2BLT4 30L ADPT E21 (GZ1, GZ10) LP840 [All Options]	3201	142.13	22.5	Premium	P3HB2XSG
2BLT4 40L ADP E21 (GZ1, GZ10) LP835 [All Options]	4197	137.81	30.5	Premium	PDWKYXFD
2BLT4 40L ADP E21 (GZ1, GZ10) LP840 [All Options]	4312	141.58	30.5	Premium	PEYXAZWD
2BLT4 40L ADPT E21 (GZ1, GZ10) LP835 [All Options]	4102	134.67	30.5	Premium	PS63CPK6
2BLT4 40L ADPT E21 (GZ1, GZ10) LP840 [All Options]	4214	138.36	30.5	Premium	PK79UR9W
2BLT4 48L ADP E21 (GZ1, GZ10) LP835 [All Options]	5032	128.09	39.3	Premium	PJ9CK6C1
2BLT4 48L ADP E21 (GZ1, GZ10) LP840 [All Options]	5169	131.6	39.3	Premium	P9W2R5AK
2BLT4 48L ADPT E21 (GZ1, GZ10) LP835 [All Options]	4917	125.17	39.3	Premium	PPFKZU3U
2BLT4 48L ADPT E21 (GZ1, GZ10) LP840 [All Options]	5052	128.6	39.3	Premium	PC8HMCH9
2BLT4 60L ADP E21 (GZ1, GZ10) LP835 [All Options]	6083	130.54	46.6	Premium	PSJ6QERM
2BLT4 60L ADP E21 (GZ1, GZ10) LP840 [All Options]	6250	134.12	46.6	Premium	PVXQXPUV
2BLT4 60L ADPT E21 (GZ1, GZ10) LP835 [All Options]	5944	127.57	46.6	Premium	PHT84BW4
2BLT4 60L ADPT E21 (GZ1, GZ10) LP840 [All Options]	6107	131.06	46.6	Premium	PXV55BC8
2BLT4 72L ADP E21 (GZ1, GZ10) LP840 [All Options]	7493	126.6	59.2		
2BLT4 72L ADPT E21 (GZ1, GZ10) LP835 [All Options]	7322	123.7	59.2		
2BLT4 72L ADPT E21 (GZ1, GZ10) LP835 [All Options]	7322	123.69	59.2	Standard	PDQS3CYK
2BLT4 72L ADPT E21 (GZ1, GZ10) LP840 [All Options]	7523	127.08	59.2	Standard	P2KKMMVN
2BLT4 85L ADP E21 (GZ1, GZ10) LP835 [All Options]	8572	128.43	66.7	Standard	PYD2G06V
2BLT4 85L ADP E21 (GZ1, GZ10) LP840 [All Options]	8699	130.33	66.7	Standard	P824IV4X
2BLT4 85L ADPT E21 (GZ1, GZ10) LP835 [All Options]	8377	125.5	66.7	Standard	PTZEW3QM
2BLT4 85L ADPT E21 (GZ1, GZ10) LP840 [All Options]	8501	127.36	66.7	Standard	P01DMEK9
2BLT4 120L ADP E21 (GZ1, GZ10) LP835 [All Options]	11716	130.63	89.7	Standard	PGM4Y7DP
2BLT4 120L ADP E21 (GZ1, GZ10) LP840 [All Options]	11889	132.56	89.7	Standard	P00DDCG2
2BLT4 120L ADPT E21 (GZ1, GZ10) LP835 [All Options]	11449	127.65	89.7	Standard	PXM0FS09
2BLT4 120L ADPT E21 (GZ1, GZ10) LP840 [All Options]	11619	129.54	89.7	Standard	PJ4GEBZM

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
2BLT4 30LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	3138	135.16	23.2	Premium	P7KEICW5
2BLT4 30LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	3224	138.86	23.2	Premium	PDOM06BH
2BLT4 30LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	3067	132.08	23.2	Premium	P7PZAJDZ
2BLT4 30LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	3151	135.7	23.2	Premium	P2N23EBP
2BLT4 40LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	4111	142.98	28.8	Premium	P67P6SSY
2BLT4 40LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	4224	146.9	28.8	Premium	P95UQD66
2BLT4 40LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	4018	139.73	28.8	Premium	PC15DQEC
2BLT4 40LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	4128	143.55	28.8	Premium	PGRCSJ2T
2BLT4 48LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	5424	158.16	34.3	Premium	PXBJBG8
2BLT4 48LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	5573	162.5	34.3	Premium	P5PQ5RRX
2BLT4 48LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	5301	154.56	34.3	Premium	P2NK2H33
2BLT4 48LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	5446	158.8	34.3	Premium	PK8C1321
2BLT4 60LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	5970	139.64	42.8	Premium	PQZN176R
2BLT4 60LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	6134	143.46	42.8	Premium	PGSCYJUC
2BLT4 60LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	5834	136.46	42.8	Premium	PZ72TAWM
2BLT4 60LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	5994	140.19	42.8	Premium	PRC4W72B
2BLT4 72LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	7275	144.19	50.5	Standard	PUB38GEQ
2BLT4 72LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	7475	148.14	50.5	Standard	P7GDH2TN
2BLT4 72LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	7110	140.91	50.5	Standard	P5CC2VKV
2BLT4 72LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	7304	144.77	50.5	Standard	P6P1BKDM
2BLT4 85LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	8162	130.76	62.4	Standard	PRTW6BXW
2BLT4 85LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	8283	132.69	62.4	Standard	P6H1V2D6
2BLT4 85LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	7977	127.78	62.4	Standard	P1V5GTA3
2BLT4 85LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	8095	129.67	62.4	Standard	PN5BKJ6E

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