

**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 >130LPW 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 X 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

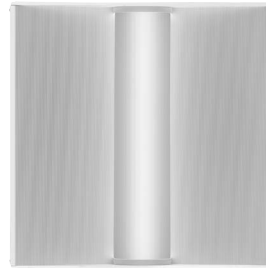
BLT Series LED

**2BLT2**

2' x 2'  
LED



ADP Diffuser Option

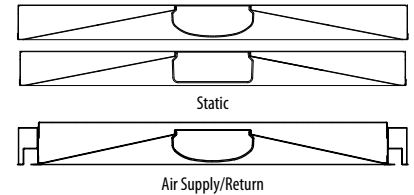


Ribbed Reflector Option



*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

**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).



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	Color temperature
2BLT2 2X2 BLT	(blank) Smooth Reflector RB Ribbed Reflector	(blank) Static A Air supply/return ‡	<b>Standard efficiency ‡ (&gt;125 LPW)</b> 20L 2000 33L 3300 40L 4000 48L 4800	<b>High efficiency ‡ (&gt;130 LPW)</b> 20LHE 2000 33LHE 3300 40LHE 4000 48LHE 4800	ADP Curved, ribbed ADSM Curved, smooth SDP Square, ribbed SDSM Square, smooth LUGR Low UGR lens ‡ <b>Includes trim rings to match sensed 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® 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 ‡	<b>Individual Control</b> MSD7ADCX PIR integral occupancy sensor with automatic dimming control photocell ‡ MSDPDT7ADCX PDT integral occupancy sensor with automatic dimming control photocell ‡ JOT Wireless room control with "Just One Touch" pairing ‡ JOTVTX15 Wireless occupancy sensor with "Just One Touch" pairing ‡

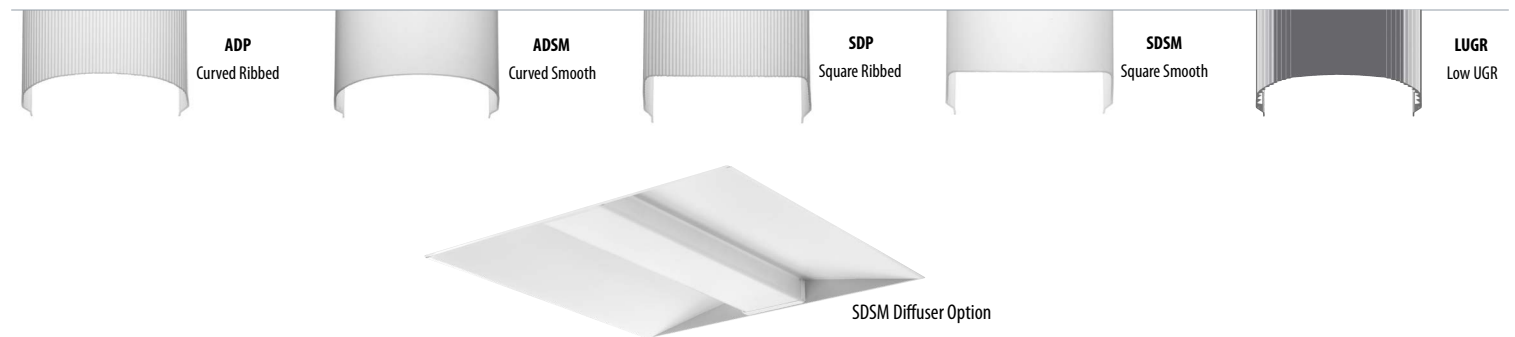
Standby Mode	Options
NOC NOC Occupancy sensor disabled ‡	<b>BDP Disconnect Plug</b> EL7L 700 lumen battery pack (Noncompliant with CA T20) ‡ EL14L 1400 lumen battery pack (Noncompliant with CA T20) ‡ E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS ‡ E10WSTAR Emergency battery pack, Enabled with STAR ‡ <b>CP Chicago plenum ‡</b> 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 ‡ <b>GLR Fast-blowing fuse ‡</b> <b>GMF Slow-blowing fuse ‡</b> NPLT Narrow pallet RRL_ RELOC®-ready luminaire ‡ LATC Earthquake clip <b>WH Glossy White</b> DWAM Anti-Microbial paint JP28 Job packaging ‡ JP44 Job packaging ‡ IPSX Gasketed diffuser compartment to meet IP5X 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 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. Consult factory for options. 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, RES7PDEEM, RIOEM	See UL924 Sequence of Operation chart on page 3. 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

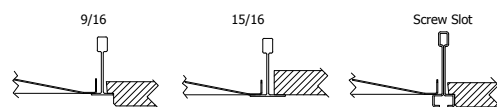


## Non-Configurable BLT

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.	
DGA22	Drywall grid adapter for 2x2 recessed fixture
2X2SMKSH 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.		
*247WJV	2DBLT24 ADP LENS ASSEMBLY	2 ft. replacement lens
*249P2P	2DBLT24 SDP LENS ASSEMBLY	2 ft. replacement lens
*249P2W	2DBLT24 ADSM LENS ASSEMBLY	2 ft. replacement lens
*249P32	2DBLT24 SDSM LENS ASSEMBLY	2 ft. replacement lens
*237LT1	2DBLT24 ADPT LENS ASSEMBLY	2 ft. replacement lens
*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.

## 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)



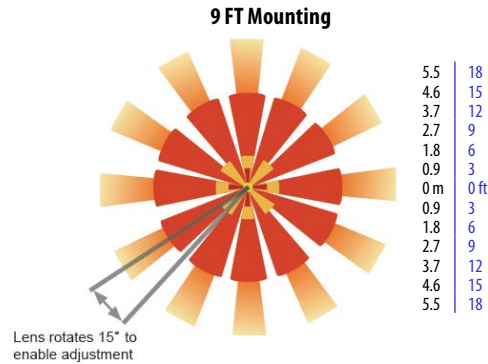


# 2BLT Volumetric Recessed Lighting 2'x2'

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	
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

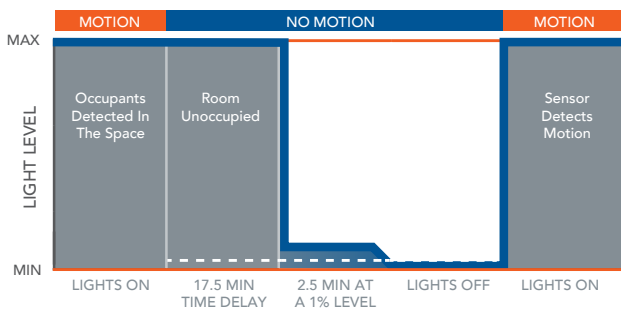
nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and nLight AIR is available with or without an integral sensor. The integrated rES7 or rES7PDT smart sensors are part of each luminaire in the nLight AIR network, which can be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

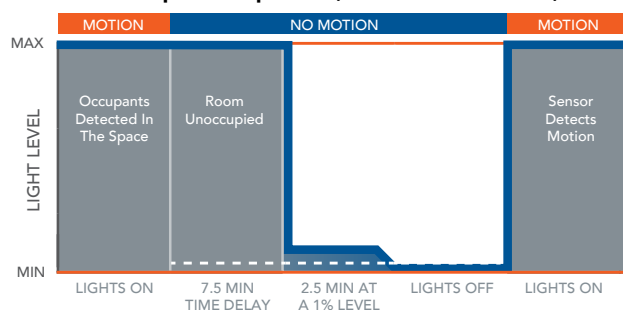
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the nESPDT7ADCX includes an 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:

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

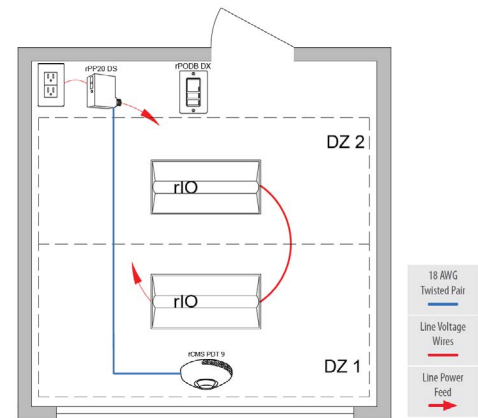
WallPod stations	Model number	Occupancy sensors	Model number
On/Off	nPODMA [Color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 RJB / nCM PDT 9 RJB
On/Off & raise/lower	nPODMA DX [Color]	Large motion 360°, ceiling (PIR / dual tech)	nCM10 RJB / nCM PDT 10 RJB
Graphic touchscreen	nPOD TOUCH [Color]	Wall switch with raise/lower	nWSX PDT LV DX [color]
Photozell 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

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

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



Sensor Switch  
WSX



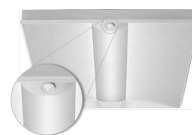
nLight WIRED  
NPOD UNITOUCH



nLight WIRED  
nPODMA DX



nLight AIR  
rPODBA



BLT with rIO



rPODBA

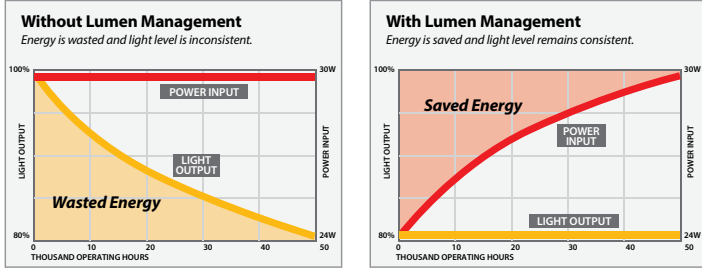


RCMS

# 2BLT Volumetric Recessed Lighting 2'x2'

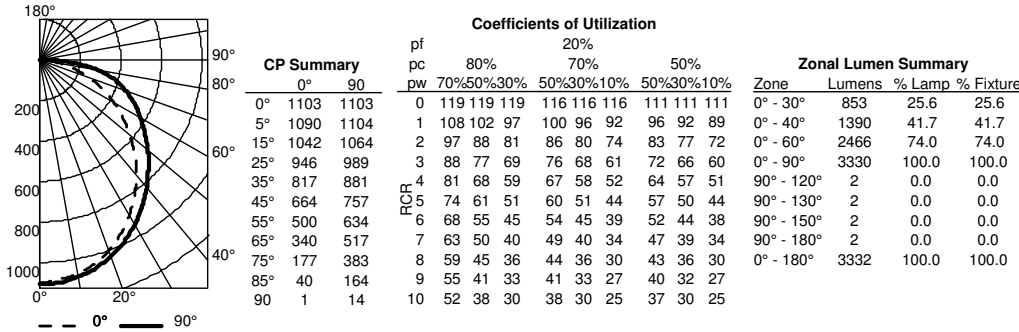
## Constant Lumen Management

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.

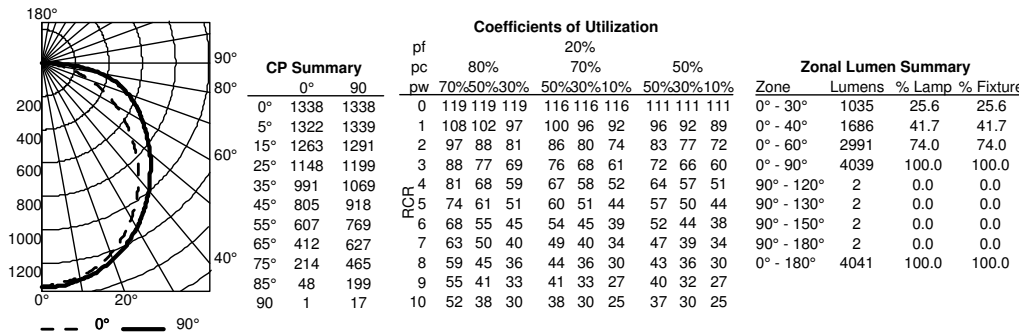


## PHOTOMETRICS

**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																			
	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. 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	PSYVDA8
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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