

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. High performance extruded acrylic diffusers conceal LEDs and efficiently deliver light in a volumetric distribution. Four 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 AlR wireless rlO 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 AlR 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 ISO Class 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 <a href="https://www.designlights.org/QPL">www.designlights.org/QPL</a> to confirm which versions are qualified.

**BUY AMERICAN** — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT.

Please refer to 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

**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



DIT

**BLT Series LED** 

**2BLT2** 

2' x 2' LED















Ribbed Reflector Option



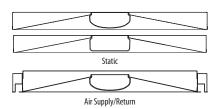


## Specifications

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.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when
  ordered with drivers marked by a shaded background\*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background\*

To learn more about A+, visit <a href="https://www.acuitybrands.com/aplus">www.acuitybrands.com/aplus</a>.

\*See ordering tree for details

COMMERCIAL INDOOR BLT-2X2



Example: 2BLT2 33L ADP EZ1 LP835

ORDERING INFORMATION

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

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‡	Standard efficiency ‡ (>125 LPW)         High efficiency ‡ (>130 LPW)           20L 2000 33L 3300 33LHE 3300         40L 4000 40LHE 4000           48L 4800 48LHE 4800	ADP Curved, ribbed ADSM Curved, smooth SDP Square, ribbed SDSM Square, smooth LUGR Low UGR lens‡ Includes trim rings to match sensored version 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 ‡	Control ‡						
nLight Wired	nLight Wired	l	Individual Co	ntrol				
(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 ‡	(blank) NES7 NESPDT7 NES7ADCX NESPDT7ADCX	No sensor control  nLight™ nES 7 PIR integral occupancy sensor ‡  nLight™ nES PDT 7 dual technology integral occupancy control ‡  nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell ‡  nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell ‡	MSD7ADCX  MSDPDT7ADCX  JOT  JOTVTX15	PIR integral occupancy sensor with automatic dimming control photocell ‡ PDT integral occupancy sensor with automatic dimming control photocell ‡ Wireless room control with "Just One Touch" pairing ‡ Wireless occupancy sensor with				
nLight Wireless (blank) no nLight ® interface	nLight Wirel	nLight AIR control with PIR integral occupancy sensor and		"Just One Touch" pairing ‡				
NLTAIR2 nLight AIR Generation 2 enabled ‡	RES7PDT	automatic dimming photocell ‡ nLight AIR control with PDT dual technology integral occupancy sensor and automatic dimming photocell ‡						
	RIO RES7EM	nLight AIR radio module without sensor ‡ 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 ‡						

Standy Mode	Options			,	
NOC NOC Occupancy sensor disabled ‡	BDP Disconnect Plug  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 ‡	CP BGTD PWS1836 PWS1846 PWS1846 PWSLV PWS1856LV	Chicago plenum ‡ Bodine Generator Transfer Device ‡ 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuit Two cables: one 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge ‡ 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/low voltage wires ‡	GLR GMF NPLT RRL_ LATC WH DWAM JP28 JP44 IP5X BAA	Fast-blowing fuse ‡ Slow-blowing fuse ‡ Narrow pallet RELOC®-ready luminaire ‡ Earthquake clip Glossy White Anti-Microbial paint Job packaging ‡ Job packaging Gasketed diffuser compartment to meet IP5X rating ‡ Buy America(n) Act Compliant

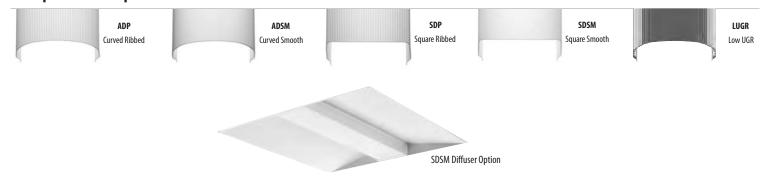
NOTE: ‡ indicates option value has ordering restrictions. Please reference the Option Value Ordering Restictions chart on the next page. Options are sorted alphanumerically.



# 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.						
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.						
СР	Not available with N80, N80EMG, N100, N100EMG, PWS1836, PWS1846, PWS1846 PWSLV or PWS1856LV.						
EL7L, EL14L, EL14LSD, E10WLCP	When using pre-wire option, use PWS1846 or PWS1846 PWSLV. For more information on the EL14LSD, please see the PSSD2 specification sheet.						
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 air supply return 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, 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**

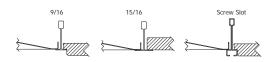


# **Non-Configurable BLT**

Stock/MT0	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

<sup>\*</sup>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.



# **Accessories & Replacement Parts**

Accessories: Order as separate catalog number.								
DGA22	Drywall grid adapter for 2x2 recessed fixture							
2X2SMKSHP 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							

Replacemen	t 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
ILB CP07 2H A	7W	120	840	Storm Shelter/ 2-hour Runtime
ILB CP10 A	10W	90	1200	
ILBLP CP10 HE SD A	10W	90	1200	Title 20, Self Diagnostic
ILBLP CP15 HE SD A	15W	90	1800	Title 20, Self Diagnostic
ILB CP20 HE A	20W	90	2400	Title 20
ILB CP20 HE SD A	20W	90	2400	Title 20, Self Diagnostic

All the above are UL Listed products that are certified for field install external/remote to the fixture.

The CP10 delivered emergency illumination outperforms legacy 1400 lumen fluorescent emergency ballast.

Please contact us at <a href="mailto:productsupportemergency@acuitybrands.com">productsupportemergency@acuitybrands.com</a> for any Emergency Battery related questions.

# **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.

- Power: Install JOT enabled fixtures and controls as instructed.
   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.





<sup>\*</sup>Minimum delivered lumen output to assist in product selection for increased fixture mounting height.

# 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**







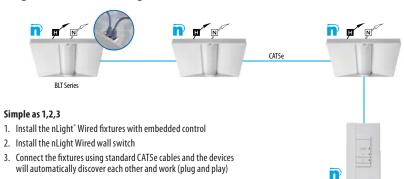
nLight Wired nPODMA

## Simple as 1,2,3

- 1. Install the nLight  $^\circ$  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



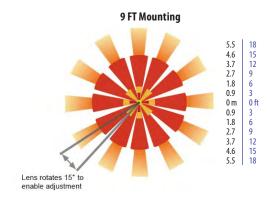
# **nLight Wired Networking**



Sensor Options									
Omtion	Automatic	Occupano	y Sensing	nLight Wired	nLight AIR Networking				
Option	Dimming Photocell	PIR	PDT	Networking					
MSD7ADCX	Х	Х							
MSDPDT7ADCX	Х		Х						
NES7		Х		Х					
NES7ADCX	Х	Х		Х					
NESPDT7			Х	Х					
NESPDT7ADCX	Х		Х	Х					
RES7	Х	Х			Х				
RESPDT7	Х	Х	Х		Х				

## 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

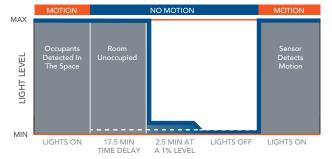
nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and nLight AIR is available with or without an integral sensor. The integrated rES7 or rES7PDT smart sensors are part of each luminaire in the nLight AIR network, which can be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

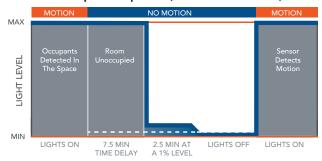
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the nESPDT7ADCX includes an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

### Sequence of Operation (MSD7 Sensor)



<sup>\*</sup>The presetting on the automatic dimming photocell is 5fc.

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



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

## **Controls Accessories**

## nLight® Wired Control Accessories: Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight.

**WallPod stations** Model number 0n/0ff nPODMA [Color]

nCM ADCX RJB

On/Off & raise/lower nPODMA DX [Color] Graphic touchscreen nPOD TOUCH [Color] **Photocell controls** Model number

Full range dimming

**Occupancy sensors** Small motion 360°, ceiling (PIR / dual tech)

Large motion 360°, ceiling (PIR / dual tech) Wall switch with raise/lower

Cat-5 cable (plenum rated) 10' cable 30' cable

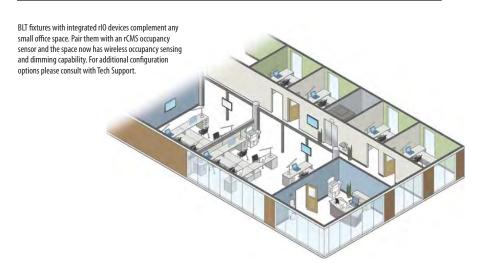
Model number nCM 9 RJB / nCM PDT 9 RJB nCM10 RJB / nCM PDT 10 RJB nWSX PDT LV DX [color]

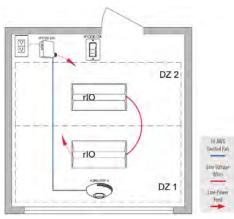
Model number CAT5 10FT J1 CAT5 30FT J1

nLight® AIR Control Accessories: Order as separate catalog number. Visit 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





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

#### Notes

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



Sensor Switch



nLight WIRED NPOD UNITOUCH



nLight WIRED nPODMA DX



nLight AIR rPODBA











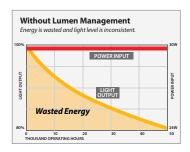
BLT with rIO

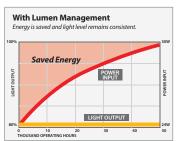
rPODBA

RCMS

# **Constant Lumen Management**

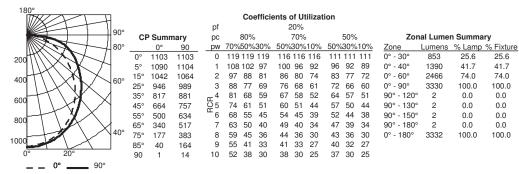
Enabled by the embedded nLight control, the BLT actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.



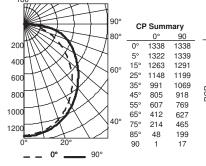


## **PHOTOMETRICS**

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



Coefficients of Utilization									
pf				2	0%				
рс		80%			70%			50%	
pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	119	119	119	116	116	116	111	111	111
1	108	102	97	100	96	92	96	92	89
2	97	88	81	86	80	74	83	77	72
3	88	77	69	76	68	61	72	66	60
rr 4	81	68	59	67	58	52	64	57	51
HOH 5	74	61	51	60	51	44	57	50	44
<sup>L</sup> 6	68	55	45	54	45	39	52	44	38
7	63	50	40	49	40	34	47	39	34
8	59	45	36	44	36	30	43	36	30
9	55	41	33	41	33	27	40	32	27
10	52	38	30	38	30	25	37	30	25

Coefficients of Utilization

Zonal Lumen Summary					
Zone	Lumens	% Lamp	% Fixture		
0° - 30°	1035	25.6	25.6		
0° - 40°	1686	41.7	41.7		
0° - 60°	2991	74.0	74.0		
0° - 90°	4039	100.0	100.0		
90° - 120°	2	0.0	0.0		
90° - 130°	2	0.0	0.0		
90° - 150°	2	0.0	0.0		
90° - 180°	2	0.0	0.0		
0° - 180°	4041	100.0	100.0		

Performance Data					
Model Number	Lumens	LPW	Watts	DLC Listing	DLC ID
2BLT2 2OL ADP EZ1 (GZ1, GZ10) LP840 [All Options]	2065.45	124.06	16.64	Premium	PM92196A
2BLT2 2OL ADP EZ1 (GZ10) LP835 [All Options]	2033	126.58	16.06	Premium	P6445UVD
2BLT2 2OL ADP GZ1 LP835 [All Options]	2033	122.11	16.64	standard	PLNK6MX8
2BLT2 2OL ADPT EZ1 (GZ10) LP840 [All Options]	2037.91	126.89	16.06	Premium	PYX15QEQ
2BLT2 2OL ADPT GZ1 LP835 [All Options]	2005.89	120.49	16.64	standard	P40HQGLB
2BLT2 20L ADPT GZ1 LP840 [All Options]	2037.91	122.41	16.64	standard	PB3HB9AK
2BLT2 33L ADP EZ1 (GZ1, GZ10) LP835 [All Options]	3332	124.92	26.67	Premium	PHSXHE8F
2BLT2 33L ADP EZ1 (GZ1, GZ10) LP840 [All Options]	3385.19	126.91	26.67	Premium	PD18CKQ8
2BLT2 33L ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	3340.05	125.22	26.67	Premium	PF98CZ2H
2BLT2 33L ADPT EZ1 (GZ10) LP835 [All Options]	3287.57	125.14	26.27	Premium	PTKZR9WQ
2BLT2 33L ADPT GZ1 LP835 [All Options]	3287.57	123.25	26.67	standard	PTN5023N
2BLT2 40L ADP EZ1 (GZ1, GZ10) LP835 [All Options]	4041	127.35	31.73	Premium	P1XWW9GV
2BLT2 40L ADP EZ1 (GZ1, GZ10) LP840 [All Options]	4105.51	129.38	31.73	Premium	PHCQ2CQF
2BLT2 40L ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	3987.12	125.65	31.73	Premium	PW6RMMJ4
2BLT2 40L ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	4050.77	127.65	31.73	Premium	P5YYDAA8
2BLT2 48L ADP EZ1 (GZ1, GZ10) LP835 [All Options]	4800	109.9	43.67	standard	PJRH1R1G
2BLT2 48L ADP EZ1 (GZ1, GZ10) LP840 [All Options]	4876.63	111.66	43.67	standard	P8G93YOK
2BLT2 48L ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	4736	108.44	43.67	standard	PITU3V6X
2BLT2 48L ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	4811.61	110.17	43.67	standard	P5X2XU76

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

HE Performance Data					
Model Number	Lumens	LPW	Watts	DLC Listing	DLC ID
2BLT2 20LHE ADP EZ1 (GZ1, GZ10) LP835 [All Options]	1948	130.59	14.91	Premium	PUQCZNQI
2BLT2 20LHE ADP EZ1 (GZ1, GZ10) LP840 [All Options]	1979.1	132.67	14.91	Premium	PJCZRW21
2BLT2 20LHE ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	1952.71	130.9	14.91	Premium	PLC4RF4L
2BLT2 33LHE ADP EZ1 (GZ1, GZ10) LP835 [All Options]	3392	137.3	24.7	Premium	PXXZN9PH
2BLT2 33LHE ADP EZ1 (GZ1, GZ10) LP840 [All Options]	3446.15	139.5	24.7	Premium	PKPJYYRF
2BLT2 33LHE ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	3346.77	135.47	24.7	Premium	PZC8BZSS
2BLT2 33LHE ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	3400.2	137.64	24.7	Premium	PM5G8AFU
2BLT2 40LHE ADP EZ1 (GZ1, GZ10) LP835 [All Options]	4118	133.71	30.79	Premium	PJ55XFFP
2BLT2 40LHE ADP EZ1 (GZ1, GZ10) LP840 [All Options]	4183.74	135.85	30.79	Premium	PEGFHPZD
2BLT2 40LHE ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	4063.09	131.93	30.79	Premium	P8E16E9B
2BLT2 40LHE ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	4127.96	134.04	30.79	Premium	PFRSSSVG
2BLT2 48LHE ADP EZ1 (GZ1, GZ10) LP835 [All Options]	4845	128	37.85	Premium	P558XUZP
2BLT2 48LHE ADP EZ1 (GZ1, GZ10) LP840 [All Options]	4922.35	130.04	37.85	Premium	P1863H56
2BLT2 48LHE ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	4780.4	126.29	37.85	Premium	PHPTG5M8
2BLT2 48LHE ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	4856.71	128.31	37.85	Premium	PBKN954Z

DLC information is subject to change, for the most up-to-date information please refer to 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

Delivered Lumens = 1.25 x P x LPW

 $P = 0 uput \ power \ of \ emergency \ driver. \ P = 10W \ for \ E10WLCP \ option.$  $LPW = Lumen\ per\ watt\ rating\ of\ the\ luminaire.\ This\ information\ is\ available\ on$ the ABL luminaire spec sheet. LPW = Lumen per watt rating of the luminaire. LPW  $\,$ information available in Performance Data section.





#### 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. High performance extruded acrylic diffusers conceal LEDs and efficiently deliver light in a volumetric distribution. Four 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 pluq-and-play convenience as devices and luminaires automatically discover each other and self-commission. nLight AIR is commissioned easily through an intutitive 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.

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 luminairs 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.

 $\textbf{LISTINGS} \ -- \ \text{CSA Certified to meet U.S. and Canadian standards. IC rated. Tested in accordance with ISO 14644-1; suitable and the suitable of the su$ for ISO Class 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 to confirm which versions are qualified.

BUY AMERICAN — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT.

Please refer to 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  $warranty\ terms\ located\ at: \underline{www.acuitybrands.com/support/warranty/terms-and-conditions}$ 

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
Туре



# unless otherwise specified.



Air Supply/Return

# **4** 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.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background\*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background\*

To learn more about A+, visit www.acuitybrands.com/aplus.

\*See ordering tree for details

All dimensions are inches (centimeters)

COMMERCIAL INDOOR BLT-2X4



Example: 2BLT4 40L ADP EZ1 LP840

ORDERING INFORMATION

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

2BLT4							
Series	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‡	Standard efficiency (>100 LPW)         High efficiency (>130 LPW)           30L 3000         30LHE 3000           40L 4000         40LHE 4000           48L 4800         48LHE 4800           60L 6000         60LHE 6000           72L 7200         72LHE 7200           85L 8500         85LHE 8500           100L 10000         120L 12000	ADP Curved, ribbed ADSM Curved, smooth SDP Square, ribbed SDSM Square, smooth LUGR Low UGR lens‡ Includes trim rings to match sensored version 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 #	Control ‡						
nLight W	ired	nLight Wire	1‡	Individual Co	ntrol				
(blank)	no nLight <sup>®</sup> interface	(blank)	No sensor control	MSD7ADCX	PIR integral occupancy sensor with				
N80	nLight with 80% lumen management	NES7	nLight™ nES 7 PIR integral occupancy sensor	MCDDDTZADCV	automatic dimming control photocell ‡				
N80EMG	nLight with 80% lumen management For use with generator supply EM power ‡	NESPDT7	nLight™ nES PDT 7 dual technology integral occupancy control	M2DAD1/ADCX	PDT integral occupancy sensor with automatic dimming control photocell ‡				
N100	nLight without lumen management	NES7ADCX	nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell	JOT	Wireless room control with "Just One Touch" pairing ‡				
N100EMG	nLight without lumen management For use with generator supply EM power ‡	NESPDT7ADCX	. nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell	JOTVTX15	Wireless occupancy sensor with "Just One Touch" pairing ‡				
nLight W	nLight Wireless		ess		Just one louch paining +				
(blank) NLTAIR2	no nLight AIR ® interface nLight AIR Generation 2 enabled ‡	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 ‡						

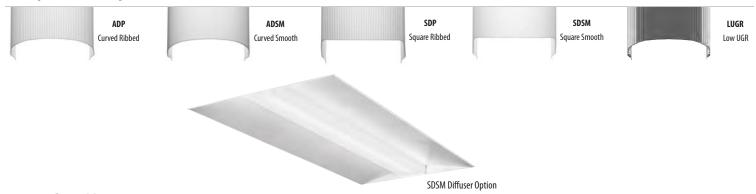
Standy Mode		Options								
NOC NOC Occup sensor disa	abled ‡	BDP Disco EL7L EL14L E10WLCP	700 lumen battery pack (Noncompliant with CA T20) ‡ 1400 lumen battery pack (Noncompliant with CA T20) ‡ EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS ‡	CP BGTD PWS1836 PWS1846 PWS1846 PWSLV PWS1856LV	Chicago plenum ‡  Bodine Generator Transfer Device ‡ 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuit Two cables: one 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge ‡ 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/low voltage wires ‡	GLR GMF NPLT RRL_ LATC WH DWAM JP14 JP22 IP5X BAA	Fast-blowing fuse ‡ Slow-blowing fuse ‡ Narrow pallet RELOC®-ready luminaire ‡ Earthquake clip Glossy White Anti-Microbial paint Job packaging ‡ Job packaging ‡ Gasketed diffuser compartment to meet IPSX rating ‡ Buy America(n) Act Compliant			

NOTE: ‡ indicates option value has ordering restrictions. Please reference the Option Value Ordering Restictions 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, EL71, EL14L, or E10WLCP options.					
A	Not available with RB fixture style, consult factory for air flow data.					
BGTD	Not available with TD, JOT, JOTVTX15 sensor options or emergency battery options. Must specify voltage. Requires BSE labeling, voltage specific. Consult factory for options. Example: BGTD BSE10.					
Controls	Must specify diffuser with trim rings.					
СР	Not available with N80, N80EMG, N100, N100EMG, PWS1836, PWS1846, PWS1846 PWSLV or PWS1856LV.					
EL14LSD, E10WLCP, EL7L, EL14L	When using pre-wire option, use PWS1846 or PWS1846 PWSLV. For more information, please see the PSSD2 specification sheet.					
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.					
JOT, JOTVTX15	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, MSDPDT7ADCX, RES7, RES7PDT, RIO, JOT, JOTVTX15. Not available when air supply/return function and sensor options are combined.					
JP18	Not available with option: NES7, NESPDT7, NESPDT7ADCX, MSD7ADCX, MSDPDT7ADCX, RES7, RES7PDT, RIO, JOT, JOTVTX15.					
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. 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.					
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: RRL_2013.					
SLD	Not available with any nLight Interface or Control options.					

# **Multiple Diffuser Options**

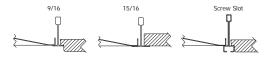


# **Non-Configurable BLT**

Non-Configurable	on-Configurable BLT							
Stock/MT0	Stock/MTO Catalog Description *		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

<sup>\*</sup>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"  $\times$  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.

# **Accessories & Replacement Parts**

Accessories: Order as separate catalog number.						
DGA24	Drywall grid adapter for 2x4 recessed fixture					
2X4SMKSHP 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				
*237M52	2DBLT48 SDPT SENSOR LENS ASSEMBLY	4 ft. replacement lens				
*237M5A	2DBLT48 ADSMT SENSOR LENS ASSEMBLY	4 ft. replacement lens				
*237M5L	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
ILB CP07 2H A	7W	120	840	Storm Shelter/ 2-hour Runtime
ILB CP10 A	10W	90	1200	
ILBLP CP10 HE SD A	10W	90	1200	Title 20, Self Diagnostic
ILBLP CP15 HE SD A	15W	90	1800	Title 20, Self Diagnostic
ILB CP20 HE A	20W	90	2400	Title 20
ILB CP20 HE SD A	20W	90	2400	Title 20, Self Diagnostic

All the above are UL Listed products that are certified for field install external/remote to the fixture.

The CP10 delivered emergency illumination outperforms legacy 1400 lumen fluorescent emergency ballast.

 $Please\ contact\ us\ at\ \underline{product supportemergency@acuitybrands.com}\ for\ any\ Emergency\ Battery\ related\ questions.$ 

# **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.

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



BLT Series





Sensor Switch

()0





**BLT Series** with integrated JOT OCC Sensors









Sensor Switch SPODMRA JOT

 $<sup>{\</sup>bf *Minimum\ delivered\ lumen\ output\ to\ assist\ in\ product\ selection\ for\ increased\ fixture\ mounting\ height.}$ 

# 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







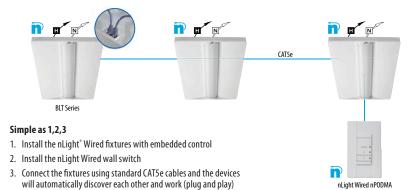
BLI Series

## Simple as 1,2,3

- 1.  $Install\ the\ nLight^{\circ}\ AIR\ fixtures\ with\ embedded\ smart\ sensor$
- 2. Install the wireless battery-powered wall switch
- With CLAIRITY+ app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome



# nLight Wired Networking



# **2BLT** Volumetric Recessed Lighting 2'x4'

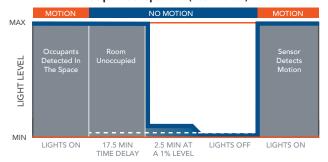
Sensor Options							
Option	Automatic Dimming Photocell	Occupano	y Sensing	nLight Wired	nLight AIR Networking		
		PIR	PDT	Networking			
MSD7ADCX	Х	Х					
MSDPDT7ADCX	Х		Х				
NES7		Х		Х			
NES7ADCX	Х	Х		Х			
NESPDT7			Х	Х			
NESPDT7ADCX	Х		Х	Х			
RES7	Х	Х			Х		
RESPDT7	Х	Х	Х		Х		

## **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.

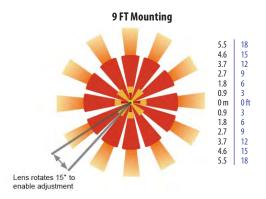
## Sequence of Operation (MSD7 Sensor)



<sup>\*</sup>The presetting on the automatic dimming photocell is 5fc.

## 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



## 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 (nES7 and rES7 and Sensor)



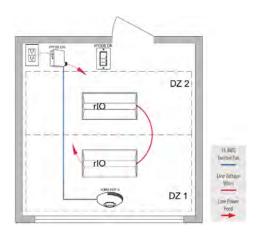
<sup>\*</sup>The presetting on the automatic dimming photocell is 5fc (NES7) and 10fc (RES7).

## **Controls Accessories**

#### nLight® Wired Control Accessories: Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight. **WallPod stations** Model number Occupancy sensors **Model number** 0n/0ff 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] Model number Cat-5 cable (plenum rated) Photocell controls Model number Full range dimming nCM ADCX RJB 10' cable CAT5 10FT J1 30' cable CAT5 30FT J1

#### **nLight\* AIR Control Accessories:**Order as separate catalog number. Visit www.acuitybrands.com/products/ controls/nlightair. Wall switches Model number rPODBA [color] G2 On/Off single pole rPODB A2P [color] G2 On/Off two pole On/Off & raise/lower single pole rPODBA DX [color] G2 On/Off & raise/lower two pole rPODBA 2P DX [color] G2





rCMS <sup>1</sup> Example: RCMS PDT 10 A						
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



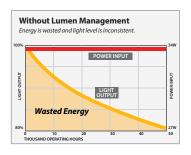


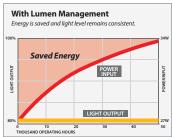


RCMS

# **Constant Lumen Management**

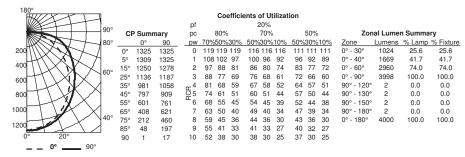
Enabled by the embedded nLight control, the BLT actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.



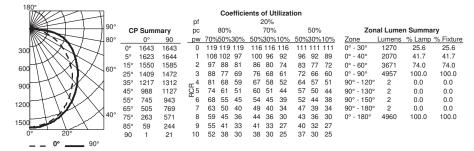


## **PHOTOMETRICS**

2BLT4 40L ADP LP835, 4000 delivered lumens, test no. ISF36900P109, tested in accordance to IESNA LM-79



2BLT4 48L ADP LP835, 4960 delivered lumens, test no. ISF 36900P117, tested in accordance to IESNA LM-79



# 2BLT Volumetric Recessed Lighting 2'x4'

Performance Data						
Model Number	Lumens	LPW	Watts	DLC Listing	DLC ID	
2BLT4 30L ADP EZ1 (GZ1, GZ10) LP835 [All Options]	2962	127.31	23.26	Premium	PWJDEMHS	
2BLT4 30L ADP EZ1 (GZ1, GZ10) LP840 [All Options]	3009.28	129.34	23.26	Premium	P18J5GLD	
2BLT4 30L ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	2969.16	127.62	23.26	Premium	P3HB2XSG	
2BLT4 40L ADP EZ1 (GZ1, GZ10) LP835 [All Options]	4000	126.22	31.69	Premium	PDWKYXFD	
2BLT4 40L ADP EZ1 (GZ1, GZ10) LP840 [All Options]	4063.86	128.23	31.69	Premium	PEYXAZWD	
2BLT4 40L ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	3946.66	124.53	31.69	Premium	PS63CPK6	
2BLT4 40L ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	4009.67	126.52	31.69	Premium	PK79UR9W	
2BLT4 48L ADP EZ1 (GZ1, GZ10) LP835 [All Options]	4960	130.5	38	Premium	PJ9CK6C1	
2BLT4 48L ADP EZ1 (GZ1, GZ10) LP840 [All Options]	5039.18	132.58	38	Premium	P9W2R5AK	
2BLT4 48L ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	4893.86	128.76	38	Premium	PPFKZU3U	
2BLT4 48L ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	4971.99	130.82	38	Premium	PC8HMCH9	
2BLT4 60L ADP EZ1 (GZ1, GZ10) LP835 [All Options]	6016	126.39	47.59	Premium	PSJ6QERM	
2BLT4 60L ADP EZ1 (GZ1, GZ10) LP840 [All Options]	6112.04	128.4	47.59	Premium	PVXQXPUV	
2BLT4 60L ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	5935.78	124.7	47.59	Premium	PHT84BW4	
2BLT4 60L ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	6030.55	126.69	47.59	Premium	PXV55BC8	
2BLT4 72L ADP EZ1 (GZ10) LP840 [All Options]	7360.66	125.3	58.74	Premium	PSCZ22CB	
2BLT4 72L ADP GZ1 LP835 [All Options]	7245	119.07	60.84	standard	PISHTCTS	
2BLT4 72L ADP GZ1 LP840 [All Options]	7360.66	120.97	60.84	standard	PBERALG7	
2BLT4 72L ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	7148.4	117.48	60.84	standard	PDQS3CYK	
2BLT4 72L ADPT EZ1 (GZ10) LP840 [All Options]	7262.52	123.63	58.74	Premium	P2KKMMVN	
2BLT4 72L ADPT GZ1 LP840 [All Options]	7262.52	119.36	60.84	standard	P10DUPC0	
2BLT4 85L ADP EZ1 (GZ1, GZ10) LP835 [All Options]	8567	116.43	73.58	standard	PYD2G06V	
2BLT4 85L ADP EZ1 (GZ1, GZ10) LP840 [All Options]	8703.77	118.28	73.58	standard	P8Z4IV4X	
2BLT4 85L ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	8452.77	114.87	73.58	standard	PTZEW3QM	
2BLT4 85L ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	8587.72	116.71	73.58	standard	P01DMEK9	
2BLT4 100L ADP EZ1 (GZ1, GZ10) LP835 [All Options]	9837	103.14	95.36	standard	PGDES20R	
2BLT4 100L ADP EZ1 (GZ1, GZ10) LP840 [All Options]	9994.04	104.79	95.36	standard	P007CHGX	
2BLT4 100L ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	9705.84	101.77	95.36	standard	PSZUQY7M	
2BLT4 100L ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	9860.79	103.39	95.36	standard	P6V6X6HY	
2BLT4 120L ADP EZ1 (GZ1, GZ10) LP835 [All Options]	11709	118.18	99.07	standard	PGM4Y7DP	
2BLT4 120L ADP EZ1 (GZ1, GZ10) LP840 [All Options]	11895.9	120.07	99.07	standard	P00DDCG2	
2BLT4 120L ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	11552.9	116.61	99.07	standard	PXM0FS09	
2BLT4 120L ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	11737.3	118.47	99.07	standard	PJ4GEBZM	

 $DLC\ information\ is\ subject\ to\ change, for\ the\ most\ up-to-date\ information\ please\ refer\ to\ www.dlc.org.\ Above\ listings\ do\ not\ cover\ 347v\ or\ SLD.$ 

HE Performance Data						
Model Number	Lumens	LPW	Watts	DLC Listing	DLC ID	
2BLT4 30LHE ADP EZ1 (GZ1, GZ10) LP835 [All Options]	3107	135.17	22.98	Premium	P7KEICW5	
2BLT4 30LHE ADP EZ1 (GZ1, GZ10) LP840 [All Options]	3156.6	137.33	22.98	Premium	PD0M06BH	
2BLT4 30LHE ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	3065.57	133.37	22.98	Premium	P7PZAJDZ	
2BLT4 30LHE ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	3114.51	135.5	22.98	Premium	P2N23EBP	
2BLT4 40LHE ADP EZ1 (GZ1, GZ10) LP835 [All Options]	4085	138.56	29.48	Premium	P67P6S5Y	
2BLT4 40LHE ADP EZ1 (GZ1, GZ10) LP840 [All Options]	4150.21	140.77	29.48	Premium	P95UQD66	
2BLT4 40LHE ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	4030.53	136.71	29.48	Premium	PC15DQEC	
2BLT4 40LHE ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	4094.88	138.89	29.48	Premium	PGRCSJ2T	
2BLT4 48LHE ADP EZ1 (GZ1, GZ10) LP835 [All Options]	4770	138.16	34.52	Premium	PXBJBGN8	
2BLT4 48LHE ADP EZ1 (GZ1, GZ10) LP840 [All Options]	4846.15	140.37	34.52	Premium	P5PQ5RRX	
2BLT4 48LHE ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	4706.4	136.32	34.52	Premium	P2NK2H33	
2BLT4 48LHE ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	4781.53	138.5	34.52	Premium	PK8C1321	
2BLT4 60LHE ADP EZ1 (GZ1, GZ10) LP835 [All Options]	5894	135.12	43.61	Premium	PQZN176R	
2BLT4 60LHE ADP EZ1 (GZ1, GZ10) LP840 [All Options]	5988.09	137.28	43.61	Premium	PG5CYJUC	
2BLT4 60LHE ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	5815.41	133.32	43.61	Premium	PZ72TAWM	
2BLT4 60LHE ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	5908.25	135.45	43.61	Premium	PRC4W72B	
2BLT4 72LHE ADP EZ1 (GZ1, GZ10) LP835 [All Options]	7149	135.94	52.58	Premium	PUB38GEQ	
2BLT4 72LHE ADP EZ1 (GZ1, GZ10) LP840 [All Options]	7263.13	138.11	52.58	Premium	P7GDHZTN	
2BLT4 72LHE ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	7053.68	134.12	52.58	Premium	P5CC2VKV	
2BLT4 72LHE ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	7166.29	136.26	52.58	Premium	P6P1BKDM	
2BLT4 85LHE ADP EZ1 (GZ1, GZ10) LP835 [All Options]	8158	128.96	63.25	Premium	PRTW6BXW	
2BLT4 85LHE ADP EZ1 (GZ1, GZ10) LP840 [All Options]	8288.24	131.02	63.25	Premium	P6H1V2D6	
2BLT4 85LHE ADPT EZ1 (GZ1, GZ10) LP835 [All Options]	8049.22	127.24	63.25	Premium	P1VG5TA3	
2BLT4 85LHE ADPT EZ1 (GZ1, GZ10) LP840 [All Options]	8177.73	129.27	63.25	Premium	PN5BKJ6E	

DLC information is subject to change, for the most up-to-date information please refer to 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

## Delivered Lumens = 1.25 x P x LPW

 $P=0 uput \ power \ of \ emergency \ driver. \ P=10W \ for E10WLCP \ option.$   $LPW=Lumen \ per \ watt \ rating \ of \ the \ luminaire. \ This \ information \ is$   $available \ on \ the \ ABL \ luminaire \ spec \ sheet. \ LPW=Lumen \ per \ watt$   $rating \ of \ the \ luminaire. \ LPW \ information \ available \ in \ Performance$   $Data \ section.$