

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 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 reflector is finished with a high reflective matte white powder paint for improved aesthetics and increased light diffusion.

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 linear prisms 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. 70% LED lumen maintenance at 60,000 hours (L70/60,000). Color Variation within 3-step MacAdam ellipse (3SDCM).

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. Simply connect all the nLight enabled control devices and the BLT luminaires using standard Cat-5 cabling. Unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission.

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.

Driver disconnect provided where required to comply with US and Canadian codes.

SENSOR — **Integrated sensor (individual control):** Sensor Switch MSD7ADCX Passive Infrared (PIR) or MSDPDT7ADCX PIR/Microphonics DualTech (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 2 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 2 for the nLight sensor options.

INSTALLATION — The BLT's low profile design provides increased installation flexibility especially in restrictive plenum applications.

Suitable for damp location.

LISTINGS — CSA Certified to meet U.S. and Canadian standards. IC rated.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/resources/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

2BLT

600x600
LED



Specifications

Length: 593.60 (23.37)

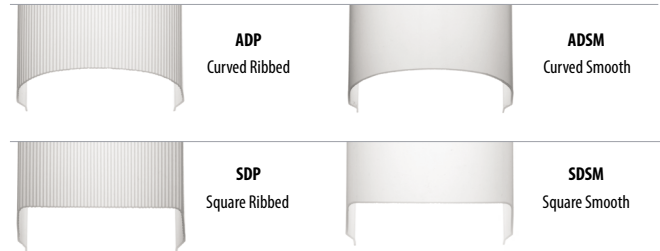
Width: 593.60 (23.37)

Depth: 63.50 (2.50)



All dimensions are millimeter (inches) unless otherwise specified.

Multiple Diffuser Options



CSA+ 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

2BLT Volumetric Recessed Lighting 600x600



A+ Capable options indicated by this color background.

ORDERING INFORMATION

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

Example: 2BLT2 MG 33L ADP EZ1 LP835

2BLT2		Trim Type		Lumens ¹		Diffuser		Voltage		Driver		Color temperature	
2BLT2	BLT series 600x600	MG	Metric Grid	Standard efficiency (>100 LPW)	High efficiency^{2,3} (>130 LPW)	ADP	Curved, linear prisms	(blank)	MVOLT	EZ1	eldoLED dims to 1% (0-10 volt dimming)	LP830	82CRI, 3000 K
				20L 2000	33LHE 3300	ADSM	Curved, smooth	120	120V	SLD		Step-level dimming ⁵	LP835
				33L 3300	40LHE 4000	SDP	Square, linear prisms	277	277V				LP840
				40L 4000	48LHE 4800	SDSM	Square, smooth	347	347V ⁴			LP850	82CRI, 5000 K
						Includes trim rings to match sensed version						LP930	90CRI, 3000K
						ADPT	Curved, linear prisms					LP935	90CRI, 3500K
						ADSMT	Curved, smooth					LP940	90CRI, 4000K
						SDPT	Square, linear prisms					LP950	90CRI, 5000K
						SDSMT	Square, smooth						

Controls		Occupancy control ⁷		Individual Control		Options	
(blank)	No nLight [®]	(blank)	No sensor control	MSD7ADCX	PIR integral occupancy sensor with automatic dimming control photocell ^{5,9}	EL7L	700 lumen battery pack ¹⁰
N80	nLight [®] with 80% lumen management	nLight Wired Networking				EL14L	1400 lumen battery pack ¹⁰
N80EMG	nLight [®] with 80% lumen management For use with generator supply EM power ⁶	NES7	nLight™ nES 7 PIR integral occupancy sensor ⁸	MSDPDT7ADCX	PDT integral occupancy sensor with automatic dimming control photocell ^{5,9}	BGTD	Bodine Generator Transfer Device ¹¹
N100	nLight [®] without lumen management	NESPDT7	nLight™ nES PDT 7 dual technology integral occupancy control ⁸			PWS1836	6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit
N100EMG	nLight [®] without lumen management For use with generator supply EM power ⁶	NES7ADCX	nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell ⁸			PWS1846	6' pre-wire, 3/8" diameter, 18 gauge, 2 circuit
		NESPDT7ADCX	nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell ⁸			PWS1846 PWSLV	Two cables: one 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge, purple and gray ¹²
						PWS1856LV	6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/low voltage purple and grey wires ¹²
						GLR	Fast-blowing fuse ¹³
						GMF	Slow-blowing fuse ¹³
						NPLT	Narrow pallet
						RRL_	RELOC [®] -ready luminaire ¹⁴
						LATC	Earthquake clip
						DWAM	Anti-Microbial paint

Accessories next page

Notes

- 1 Approximate lumen output.
- 2 All versions may not achieve 130+ LPW. Refer to photometry on www.acuitybrands.com.
- 3 90 CRI and versions with integral sensor trim rings may not achieve 130 LPW.
- 4 Not available with SLD driver, EL7L or EL14L battery packs.
- 5 Not available with N80, N80EMG, N100 N100EMG or occupancy control.
- 6 nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.
- 7 Must specify diffuser with trim rings. See sensor options on page 3.
- 8 Requires N80, N80EMG, N100, or N100EMG.
- 9 Only available with EZ1 driver option. 0-10v dimming wires not accessible via access plate.
- 10 When using pre-wire option, use PWS1846. or PWS1846 PWSLV.
- 11 Must specify voltage. Requires BSE labeling. Consult factory for options.
- 12 Not available with nLIGHT wired network or individual controls.
- 13 Must specify voltage, 120 or 277 with GLR & GMF fusing.
- 14 For ordering logic consult: RRL_2013.

2BLT Volumetric Recessed Lighting 600x600

nLight® Control Accessories:

Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight.

WallPod stations	Model number	Occupancy sensors	Model number
On/Off	nPODM [color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 RJB / nCM PDT 9 RJB
On/Off & raise/lower	nPODM DX [color]	Large motion 360°, ceiling (PIR / dual tech)	nCM10 RJB / nCM PDT 10 RJB
Graphic touchscreen	nPOD GFX [color]	Wall switch with raise/lower	nWSX PDT LV DX [color]
Photocell controls	Model number	Cat-5 cable (plenum rated)	Model number
Full range dimming	nCM ADCX RJB	10' cable	CAT5 10FT J1
		30' cable	CAT5 30FT J1

Replacement Parts: Order as separate catalog number.

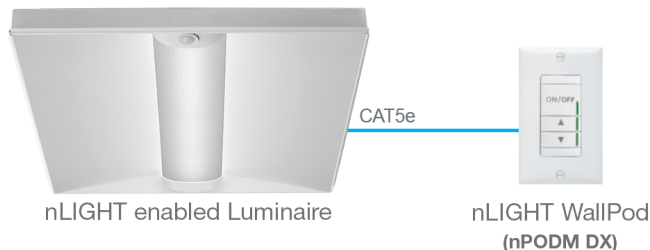
*249P3P	DBLT24 ADP LENS ASSEMBLY	2 ft. replacement lens
*249P3V	DBLT24 SDP LENS ASSEMBLY	2 ft. replacement lens
*249P3Y	DBLT24 ADSM LENS ASSEMBLY	2 ft. replacement lens
*249P4L	DBLT24 SDSM LENS ASSEMBLY	2 ft. replacement lens
*237LT1	DBLT24 ADPT LENS ASSEMBLY	2 ft. replacement lens
*237LT3	DBLT24 SDPT LENS ASSEMBLY	2 ft. replacement lens
*237LT5	DBLT24 ADSMT LENS ASSEMBLY	2 ft. replacement lens
*237LT7	DBLT24 SDSMT LENS ASSEMBLY	2 ft. replacement lens
*237LT9	DBLT24 ADPT SENSOR LENS ASSEMBLY	2 ft. replacement lens
*237M4Y	DBLT24 SDPT SENSOR LENS ASSEMBLY	2 ft. replacement lens
*237M57	DBLT24 ADSMT SENSOR LENS ASSEMBLY	2 ft. replacement lens
*237M5H	DBLT24 SDSMT SENSOR LENS ASSEMBLY	2 ft. replacement lens

2BLT Volumetric Recessed Lighting 600x600

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



Basic nLight Zone



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.

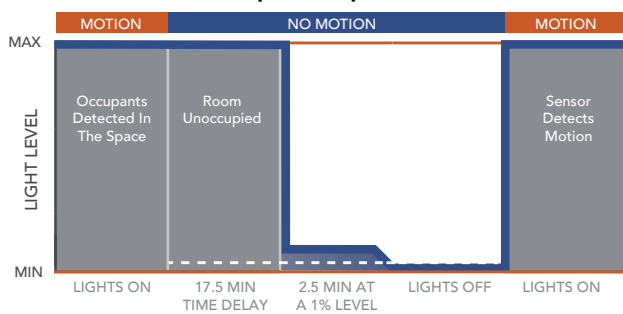
The MSDPDT7ADCX PIR/Microphonics Dual Tech occupancy sensor/automatic dimming photocell is ideal for areas with obstructions and where daylight harvesting is desired. Suggested applications include, but not limited to, open offices, private offices, classrooms, public restrooms, and conference rooms.

nLight 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.

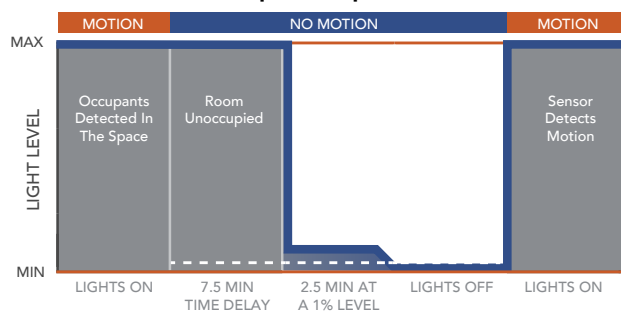
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the NESPDT7ADCX includes an integrated photocell, which enables daylight harvesting controls which is ideal for areas where windows are present.

Sequence of Operation



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

Sequence of Operation

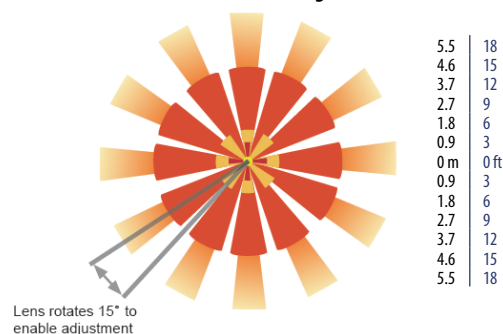


*The presetting on the automatic dimming photocell is 5fc.

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

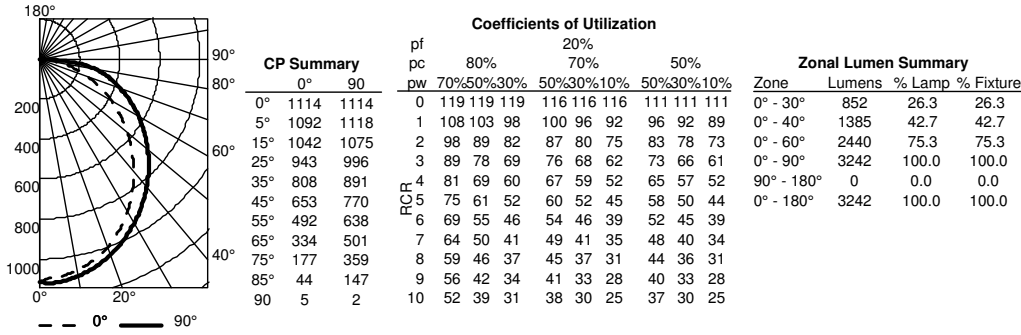
9 FT Mounting



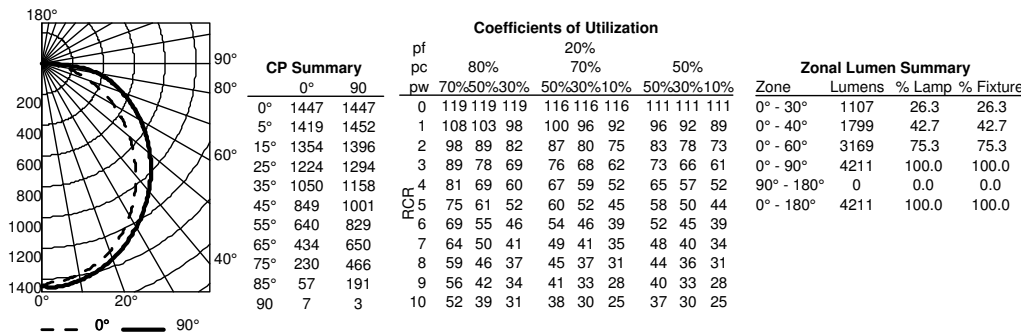
2BLT Volumetric Recessed Lighting 600x600

PHOTOMETRICS

2BLT2 MG 33L ADP LP835, 3241 delivered lumens, test no. LTL28918P128, tested in accordance to IESNA LM-79

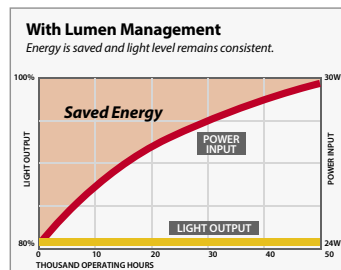
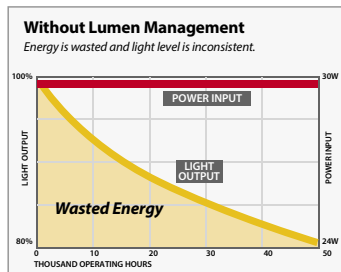


2BLT2 MG 40L ADP LP835, 4210 delivered lumens, test no. LTL28918P129, tested in accordance to IESNA LM-79



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.



Performance Data				
Lumen Package	Lumens	Input Watts	LPW	
20L ADP LP830	2157	20	110	
20L ADP LP835	2213	20	113	
20L ADP LP840	2261	20	116	
20L ADP LP850	2373	20	121	
33L ADP LP830	3160	30	106	
33L ADP LP835	3241	30	108	
33L ADP LP840	3313	30	111	
33L ADP LP850	3476	30	116	
40L ADP LP830	4103	39	106	
40L ADP LP835	4209	39	108	
40L ADP LP840	4302	39	111	
40L ADP LP850	4514	39	116	

HE Performance Data				
Lumen Package	Lumens	Input Watts	LPW	
40LHE ADP LP830	4118	32	127	
40LHE ADP LP835	4224	32	131	
40LHE ADP LP840	4317	32	134	
40LHE ADP LP850	4530	32	140	
48LHE ADP LP830	4699	37	128	
48LHE ADP LP835	4820	37	131	
48LHE ADP LP840	4927	37	134	
48LHE ADP LP850	5169	37	140	

MOUNTING DATA	
Ceiling Type	Appropriate Trim Type
Exposed grid tee (1" and 9/16")	MG
Concealed grid tee	MG

