

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 — BLT enclosure components are die-formed for dimensional consistency and painted after fabrication with a polyester powder paint for improved performance and protection.

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. Injection molded diffuser light traps add a finished look to the diffuser ends and help seal the diffuser to the housing end plates. Optional diffuser trim rings provide an attractive mounting for integral sensors as well as adding a decorative element to the luminaire aesthetics.

LED boards are accessible from below; driver is 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. 90% LED lumen maintenance at 60,000 hours (L90/60,000).

Non-Configurable BLT: 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. 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 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 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 of only 2-3/8" provides increased installation flexibility especially in restrictive plenum applications. The BLT fits into standard 15/16" and narrow 9/16" T-grid ceiling systems.

Suitable for damp location.

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

LISTINGS — CSA Certified to meet U.S. and Canadian standards. IC rated. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List to confirm which versions are qualified.

WARRANTY — 5-year limited warranty

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.

BLT Series LED

2BLT

2' x 4'
LED



eldoLED



Specifications

Length: 47-3/4 (121.2)

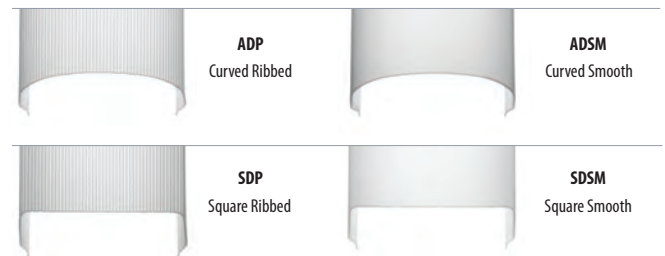
Width: 23-3/4 (60.3)

Depth: 2-3/8 (6.0)



All dimensions are inches (centimeters) unless otherwise specified.

Multiple Diffuser Options



2BLT Volumetric Recessed Lighting 2'x4'

ORDERING INFORMATION

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

Example: 2BTL4 40L ADP SLD LP840

2BLT4		Air function		Lumens ¹		Diffuser		Voltage		Driver		Color temperature	
2BLT4	2x4 BLT	(blank)	Static	Standard efficiency (>100 LPW)	High efficiency (>130 LPW)	ADP	Curved, Linear Prisms	(blank)	MVOLT	EZ1	eldoLED dims to 1% (0-10 volt dimming)	LP830	82CRI, 3000 K
				30L 3000	48LHE 4800	ADSM	Curved, Smooth	347	347 ²	SLD	Step-level dimming ³	LP835	82CRI, 3500 K
				40L 4000	60LHE 6000	SDP	Square, Linear Prisms					LP840	82CRI, 4000 K
				48L 4800	72LHE 7200	SDSM	Square, Smooth					LP850	82CRI, 5000 K
				60L 6000	85LHE 8500	Diffusers w/ trim rings						LP930	90CRI, 3000K
				72L 7200		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 ⁵				Options	
(blank)	No nLight®	(blank)	No sensor control			EL7L	700 lumen battery pack ⁸
N80	nLight® with 80% lumen management	NES7	nLight Wired Networking	MSD7ADCX	Individual Control	EL14L	1400 lumen battery pack ⁸
N80EMG	nLight® with 80% lumen management For use with generator supply EM power ⁴	NESPDT7	nLight™ nES 7 PIR integral occupancy sensor ⁶		PIR integral occupancy sensor with automatic dimming control photocell ^{5,7}	CP	Chicago plenum
N100	nLight® without lumen management		nLight™ nES PDT 7 dual technology integral occupancy control ⁶	MSDPDT7ADCX	PDT integral occupancy sensor with automatic dimming control photocell ^{5,7}	BGTD	Bodine Generator Transfer Device
N100EMG	nLight® without lumen management For use with generator supply EM power ⁴	NES7ADCX	nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell ⁶			PWS1836	6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit
						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 ⁶			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
						PWS1856LV	6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/low voltage purple and grey wires
						GLR	Fast-blowing fuse ⁹
						GMF	Slow-blowing fuse ⁹
						NPLT	Narrow pallet
						RRL_	RELOC®-ready luminaire ¹⁰
						LATC	Earthquake clip
						DWAM	Anti-Microbial paint

Accessories: Order as separate catalog number.	
DGA24	Drywall grid adapter for 2x4 recessed fixture

nLight® Control Accessories: Order as separate catalog number. Visit www.sensorswitch.com/nLight for complete listing of nLight controls.			
WallPod stations	Model number	Occupancy sensors	Model number
On/Off	nPODM [color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPODM DX [color]	Large motion 360°, ceiling (PIR / dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX	Wall switch with raise/lower	nWSXPDTLVDX
Photocell controls	Model number	Cat-5 cable bundles (plenum rated)	Model number
On/Off & Dimming	nCM ADCX	10', 15 pieces per bundle	CATS 10FT
		30', 15 pieces per bundle	CATS 30FT

Non-Configurable BLT Configurations								
Stock/MTO	Catalog Description *	UPC	Lumens	Wattage	LPW	Color Temperature	Voltage	Pallet Qty
Stock	2BLT4 40L ADP LP835	00889804471953	3945	34	116	3500K/82 CRI	120-277	26
	2BLT4 40L ADP LP840	00889804488265	4032	34	118	4000K/82CRI	120-277	26
	2BLT4 46L ADP LP835	00889804541403	4520	38.34	118	3500K/82 CRI	120-277	26
	2BLT4 46L ADP LP840	00889804541533	4620	38.34	120	4000K/82CRI	120-277	26
MTO	2BLT4 40L ADP 347 LP835	00889804569452	3945	34	116	3500K/82 CRI	347	26
	2BLT4 40L ADP 347 LP840	00889804569469	4032	34	118	4000K/82CRI	347	26
	2BLT4 46L ADP 347 LP835	00889804569476	4520	38.34	118	3500K/82 CRI	347	26
	2BLT4 46L ADP 347 LP840	00889804569490	4620	38.34	120	4000K/82CRI	347	26

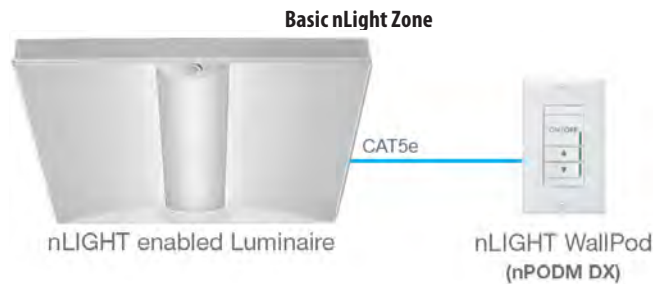
*0-10V Dimming to 10%.

Notes

- 1 Approximate lumen output.
- 2 Not available with SLD, EL7L or EL14L battery packs.
- 3 Not available with N80, N80EMG, N100, N100EMG or occupancy control.
- 4 nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.
- 5 Must specify diffuser with trims rings. See sensor options on page 3.
- 6 Requires N80, N80EMG, N100, or N100EMG.
- 7 Only available with EZ1 driver option. 0-10v dimming wires not accessible via access plate.
- 8 When using pre-wire option, use PWS1846 or PWS1846 PWSLV.
- 9 Must specify voltage, 120 or 277.
- 10 For ordering logic consult: [RRL_2013](#).

2BLT Volumetric Recessed Lighting 2'x4'

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



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.

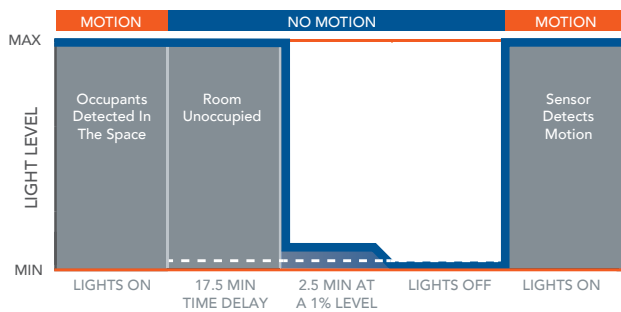
The MSDPDT7ADCX PIR/Microphonics Dual Tech occupancy sensor/automatic dimming photocell is ideal for areas with obstructions and where daylight harvesting is desired. Suggested applications include, but not limited to, open offices, private offices, classrooms, public restrooms, and conference rooms.

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.

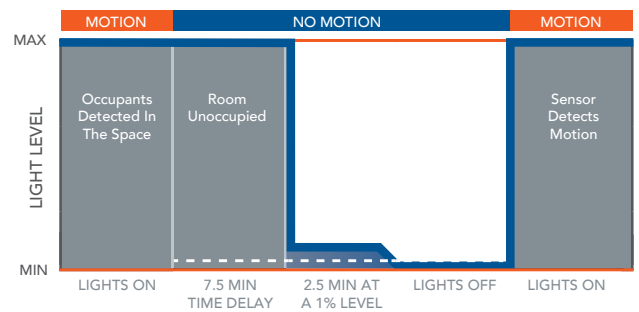
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the NESPDT7ADCX includes an 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

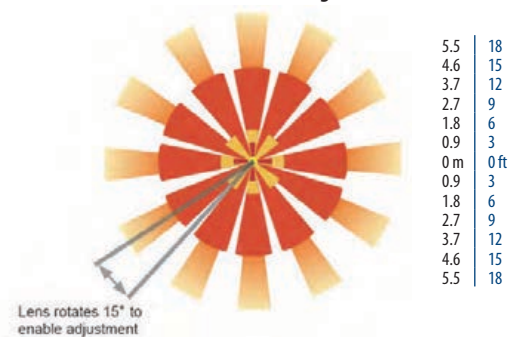


*The presetting on the automatic dimming photocell is 5fc.

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

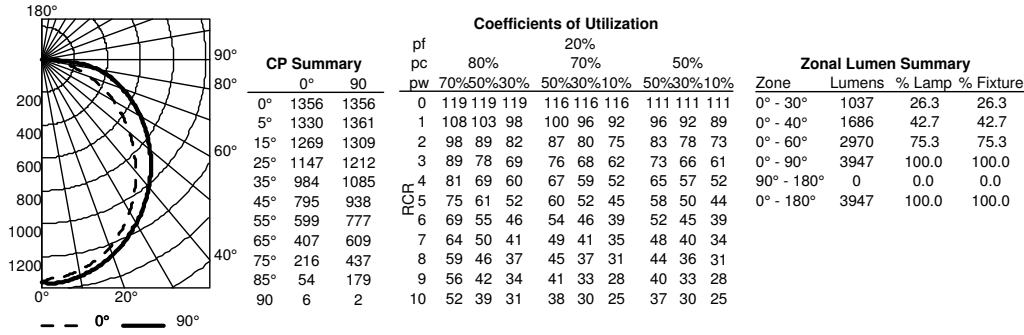
9 FT Mounting



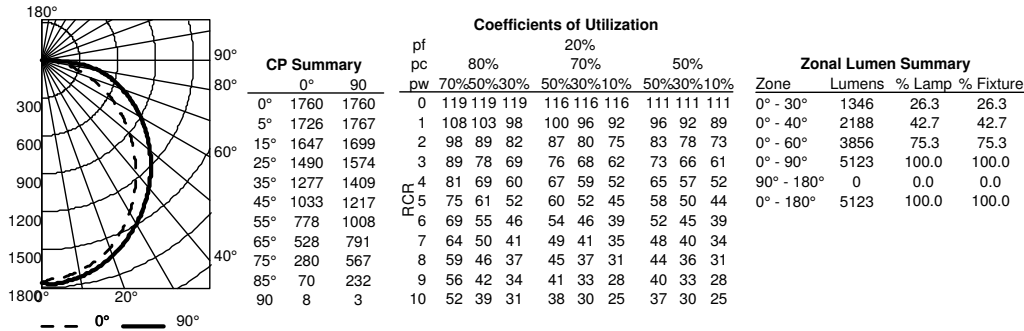
2BLT Volumetric Recessed Lighting 2'x4'

PHOTOMETRICS

2BLT4 40L ADP LP835, 3945 delivered lumens, test no. LTL28918P37, tested in accordance to IESNA LM-79

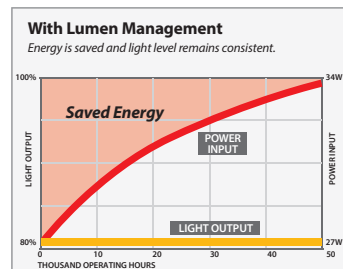
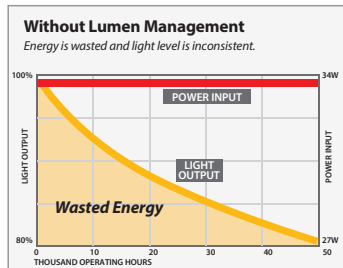


2BLT4 48L ADP L835, 5121 delivered lumens, test no. LTL28918P41, tested in accordance to IESNA LM-79



Constant Lumen Management

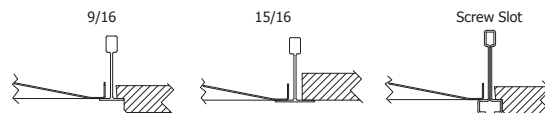
Enabled by the embedded nLight control, the BLT actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.



Performance Data			
Lumen Package	Lumens	Input Watts	LPW
30L ADP LP830	3286	30	110
30L ADP LP835	3371	30	113
30L ADP LP840	3445	30	115
30L ADP LP850	3614	30	121
40L ADP LP830	3846	34	113
40L ADP LP835	3945	34	116
40L ADP LP840	4032	34	118
40L ADP LP850	4230	34	124
48L ADP LP830	4993	45	111
48L ADP LP835	5121	45	114
48L ADP LP840	5234	45	116
48L ADP LP850	5492	45	122
60L ADP LP830	6014	53	114
60L ADP LP835	6169	53	117
60L ADP LP840	6305	53	119
60L ADP LP850	6615	53	125
72L ADP LP830	7388	67	110
72L ADP LP835	7579	67	113
72L ADP LP840	7746	67	115
72L ADP LP850	8127	67	121

HE Performance Data			
Lumen Package	Lumens	Input Watts	LPW
48LHE ADP LP830	4655	36	127
48LHE ADP LP835	4775	36	130
48LHE ADP LP840	4880	36	133
48LHE ADP LP850	5121	36	139
60LHE ADP LP830	5473	42	129
60LHE ADP LP835	5614	42	132
60LHE ADP LP840	5738	42	135
60LHE ADP LP850	6020	42	142
72LHE ADP LP830	6805	52	130
72LHE ADP LP835	6981	52	133
72LHE ADP LP840	7135	52	136
72LHE ADP LP850	7486	52	143
85LHE ADP LP830	8189	64	127
85LHE ADP LP835	8400	64	131
85LHE ADP LP840	8585	64	134
85LHE ADP LP850	9008	64	140

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 48-3/4" (Tolerance is +1/8", -0").