

## 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 (2-3/4") 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. 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. 80% LED lumen maintenance at 60,000 hours (L80/60,000). Color Variation within 3-step MacAdam ellipse (3SDCM).

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 2-3/4" provides increased installation flexibility especially in restrictive plenum applications. The BLT fits into 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.

**WARRANTY** — 5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/resources/terms-and-conditions](http://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



# 20BLT4

20"x48"  
LED



eldoLED



### Specifications

Length: 47.75 (121.29)

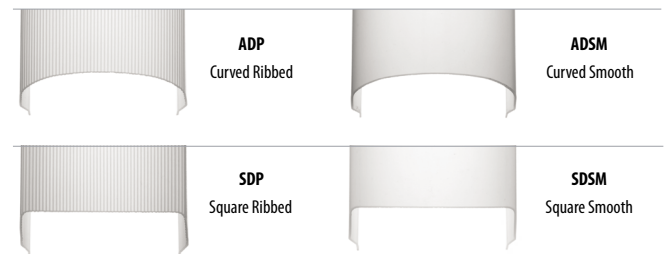
Width: 19.75 (50.17)

Depth: 2.75 (6.99)



All dimensions are inches (centimeters) 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](http://www.acuitybrands.com/aplus).

\*See ordering tree for details

# 20BLT Volumetric Recessed Lighting 20"x48"



A+ Capable options indicated by this color background.

## ORDERING INFORMATION

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

**Example:** 20BLT4 40L ADP EZ1 LP835

20BLT4						
Series		Lumens <sup>1</sup>	Diffuser	Voltage	Driver	Color temperature
20BLT4 BLT series 20"x48"	30L	3000	ADP Curved, linear prisms	(blank) MVOLT	EZ1 eldoLED dims to 1% (0-10 volt dimming)	LP830 82CRI, 3000 K
	40L	4000	ADSM Curved, smooth	120 120V	GZ1 Dims to 1% (0-10V dimming) <sup>3</sup>	LP835 82CRI, 3500 K
	48L	4800	SDP Square, linear prisms	277 277V		LP840 82CRI, 4000 K
	60L	6000	SDSM Square, smooth	347 347V <sup>2</sup>	GZ10 Dims to 10% (0-10V dimming) <sup>3</sup>	LP850 82CRI, 5000 K
	72L	7200	<b>Diffusers w/ trim rings</b>		SLD Step-level dimming <sup>4</sup>	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 <sup>6</sup>		Options	
(blank)	No nLight <sup>®</sup>	(blank)	No sensor control	EL7L	700 lumen battery pack <sup>9</sup>
N80	nLight <sup>®</sup> with 80% lumen management	<b>nLight Wired Networking</b>		EL14L	1400 lumen battery pack <sup>9</sup>
N80EMG	nLight <sup>®</sup> with 80% lumen management For use with generator supply EM power <sup>5</sup>	NES7	nLight™ nES 7 PIR integral occupancy sensor <sup>7</sup>	BGTD	Bodine Generator Transfer Device <sup>10</sup>
N100	nLight <sup>®</sup> without lumen management	NESPDT7	nLight™ nES PDT 7 dual technology integral occupancy control <sup>7</sup>	PWS1836	6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit
N100EMG	nLight <sup>®</sup> without lumen management For use with generator supply EM power <sup>5</sup>	NES7ADCX	nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell <sup>7</sup>	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 <sup>7</sup>	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 <sup>11</sup>
				PWS1856LV	6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/low voltage purple and grey wires <sup>11</sup>
				GLR	Fast-blowing fuse <sup>12</sup>
				GMF	Slow-blowing fuse <sup>12</sup>
				NPLT	Narrow pallet
				RRL_	RELOC <sup>®</sup> -ready luminaire <sup>13</sup>
				LATC	Earthquake clip
				DWAM	Anti-Microbial paint
				CP	Chicago plenum <sup>14</sup>

Accessories next page

### Notes

- 1 Approximate lumen output.
- 2 Not available with SLD driver, EL7L or EL14L battery packs.
- 3 GZ1, GZ10 not available with Controls or Sensor options.
- 4 Not available with N80, N80EMG, N100, N100EMG or occupancy control.
- 5 nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.
- 6 Must specify diffuser with trims rings. See sensor options on page 3.
- 7 Requires N80, N80EMG, N100, or N100EMG.
- 8 Only available with EZ1 driver option. 0-10v dimming wires not accessible via access plate.
- 9 When using pre-wire option, use PWS1846 or PWS1846 PWSLV.
- 10 Must specify voltage. Requires BSE labeling. Consult factory for options.
- 11 Not available with nLIGHT wired network or individual controls.
- 12 Must specify voltage, 120 or 277 with GLR & GMF fusing.
- 13 For ordering logic consult: [RRL\\_2013](#).
- 14 Not available with N80, N80EMG, N100, or N100EMG.

## 20BLT Volumetric Recessed Lighting 20"x48"

### Accessories: Order as separate catalog number.

DGA204 Drywall grid adapter for 20"x 48" recessed fixture

### nLight® Control Accessories:

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

WallPod stations	Model number	Occupancy sensors	Model number
On/Off	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.

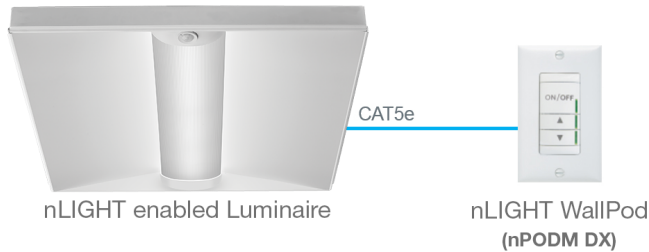
*237LKE	DBLT48 ADP LENS ASSEMBLY	4 ft. replacement lens (light traps included)
*237LKL	DBLT48 SDP LENS ASSEMBLY	4 ft. replacement lens (light traps included)
*237LL2	DBLT48 ADSM LENS ASSEMBLY	4 ft. replacement lens (light traps included)
*237LLA	DBLT48 SDSM LENS ASSEMBLY	4 ft. replacement lens (light traps included)
*237LT2	DBLT48 ADPT LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237LT4	DBLT48 SDPT LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237LT6	DBLT48 ADSMT LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237LT8	DBLT48 SDSMT LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237LTA	DBLT48 ADPT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237M52	DBLT48 SDPT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237M5A	DBLT48 ADSMT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237M5L	DBLT48 SDSMT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)

# 20BLT Volumetric Recessed Lighting 20"x48"

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.

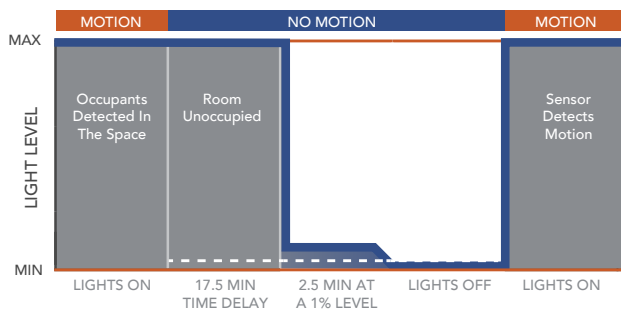
The MSDPDT7ADCX PIR/Microphonics Dual Tech occupancy sensor/automatic dimming photocell is ideal for areas with obstructions and where daylight harvesting is desired. Suggested applications include, but not limited to, open offices, private offices, classrooms, public restrooms, and conference rooms.

## 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.

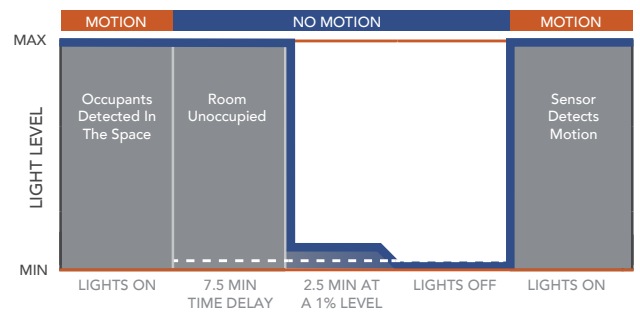
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the NESPDT7ADCX includes an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

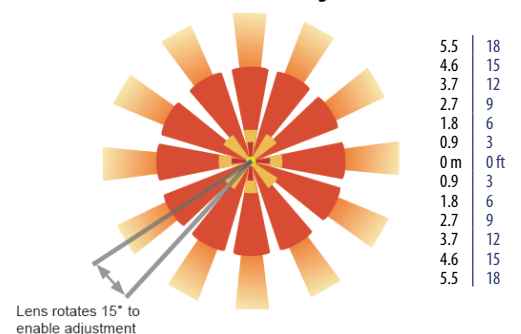


\*The presetting on the automatic dimming photocell is 5fc.

## 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

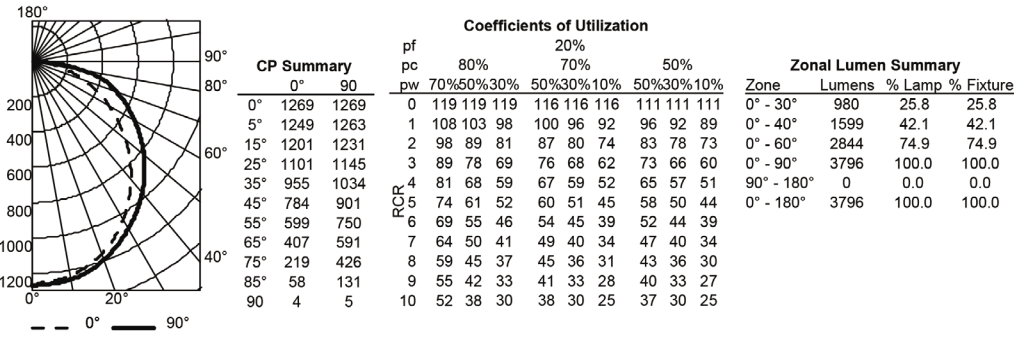
## 9 FT Mounting



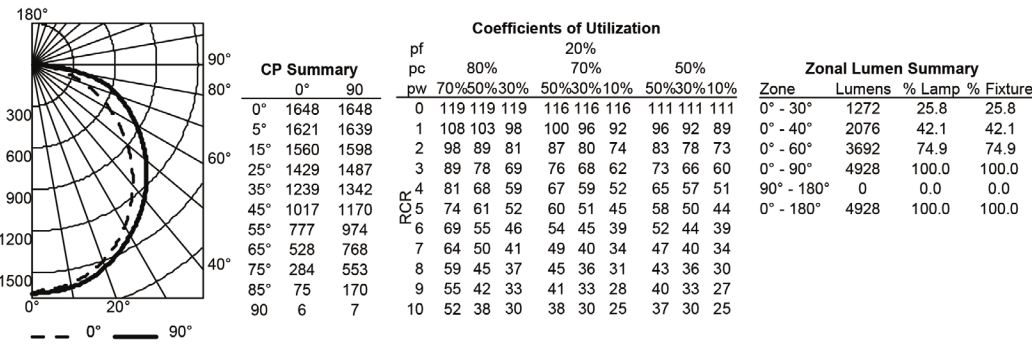
# 20BLT Volumetric Recessed Lighting 20"x48"

## PHOTOMETRICS

20BLT4 40L ADP LP835, 3795 delivered lumens, test no. ISF30109P5, tested in accordance to IESNA LM-79

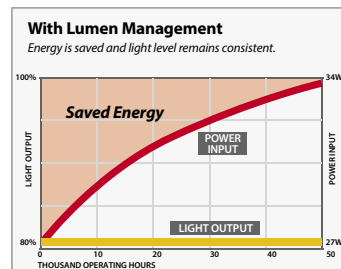
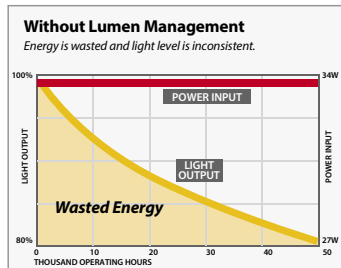


20BLT4 48L ADP LP835, 4926 delivered lumens, test no. ISF30109P9, tested in accordance to IESNA LM-79

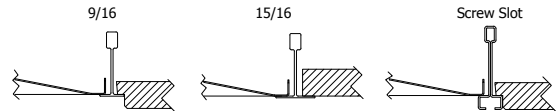


## Constant Lumen Management

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.



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 20-3/4" x 48-3/4" (Tolerance is +1/8", -0").

Performance Data			
Lumen Package	Lumens	Input Watts	LPW
30L ADP LP830	3178	30	106
30L ADP LP835	3243	30	108
30L ADP LP840	3331	30	111
30L ADP LP850	3359	30	112
40L ADP LP830	3720	34	109
40L ADP LP835	3795	34	111
40L ADP LP840	3898	34	114
40L ADP LP850	3952	34	116
48L ADP LP830	4828	45	107
48L ADP LP835	4927	45	110
48L ADP LP840	5060	45	112
48L ADP LP850	5104	45	113
60L ADP LP830	5816	53	110
60L ADP LP835	5935	53	112
60L ADP LP840	6096	53	115
60L ADP LP850	6148	53	116
72L ADP LP830	7145	67	106
72L ADP LP835	7291	67	108
72L ADP LP840	7489	67	111
72L ADP LP850	7553	67	112