LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

BLT Series LED

2BLT Tunable White

2' x 4'
LED

eldoLED nLIGHT

Specifications

Length: 47-3/4 (121.2)

Width: 23-3/4 (60.3)

Depth: 2-9/16 (6.5)

All dimensions are inches (centimeters) unless otherwise specified.

Mulitple Diffuser Options

ADP
Curved Ribbed

ADSM
Curved Smooth

SDP
Square Ribbed

SDSM
Square Smooth

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 (2-9/16") also makes it an excellent choice for renovation projects.

BLT Tunable White is perfect in classrooms and educational settings as it allows the light color temperature to be adjusted to the optimal light level for student tasks such as reading or test taking.

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. 80% LED lumen maintenance at 60,000 hours (L80/60,000).

eldoLED driver options deliver choice of dimming range, and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

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.

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

Mainstream Dynamic Tunable White with nTune Technology: 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.

Integrated Sensor (nLight Wired Networking): Tunable white nTune™ is an all digital light color temperature control within an nLight enabled luminaire. This brings tunable white lighting control into the mainstream with repeatable, consistent results in an economical luminaire form and system already familiar to schools. Designers and facility operators are granted the freedom to tie scenes to specific activities or to complement colors or materials within a visual environment. nTune™ allows color temperature settings through the Productivity Range of 3000K-5000K. Refer to the Programming User's Guide for instructions on customizing to your application with SensorView™.

INSTALLATION — The BLT's low profile design of only 2-9/16" 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.

WARRANTY — 5-year limited warranty. Complete warranty terms located at
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

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.

2BLT Tunable White Volumetric Recessed Lighting 2'x4'

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

Example: 2BLT4 TUWH PROR 40L ADP NLT

2BLT4					
Series	**Dynamic feature**	**Dynamic range**	**Lumens[1]**	**Diffuser**	**Voltage**
2BLT4 2x4 BLT	TUWH Tunable white	PROR Productivity range (3000-5000K)	30L 3000 40L 4000 48L 4800 60L 6000	ADP Curved, linear prisms ADSM Curved, smooth SDP Square, linear prisms SDSM Square, smooth **Diffusers w/ trim rings** ADPT Curved, linear prisms ADSMT Curved, smooth SDPT Square, linear prisms SDSMT Square, smooth	(blank) MVOLT 120 120 277 277 347 347[2]

Control interface type	**Occupancy control[4]**	**Options**
NLT nLight nTune interface[3]	(blank) No sensor control **nLight Wired Networking** NES7 nLight™ nES 7 PIR integral occupancy sensor NESPDT7 nLight™ nES PDT 7 dual technology integral occupancy control NES7ADCX nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell NESPDT7ADCX nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell	EL7L 700 lumen battery pack[5] EL14L 1400 lumen battery pack[5] BGTD Bodine Generator Transfer Device[6] PWS1836 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit PWS1846 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuit GLR Fast-blowing fuse[7] GMF Slow-blowing fuse[7] NPLT Narrow pallet RRL_ RELOC®-ready luminaire[8] 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.acuitybrands.com/products/controls/nlight.

WallPod stations	**Model number**	**Occupancy sensors**	**Model number**
On/Off	nPODM	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 RJB / nCM PDT 9 RJB
On/Off & raise/lower	nPODM DX	Large motion 360°, ceiling (PIR / dual tech)	nCM10 RJB / nCM PDT 10 RJB
		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
Power Supply			
nLight Power Supply	nPS 80		

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)

Notes
1. Approximate lumen output.
2. Not available with EL7L or EL14L battery packs.
3. Requires power from nLight network bridge or nPS 80.
4. Must specify diffuser with trims rings. See sensor options in ordering information.
5. When using pre-wire option, use PWS1846.
6. Requires BSE labeling. Consult factory for options.
7. Must specify voltage, 120 or 277 with GLR & GMF fusing.
8. For ordering logic consult: RRL_2013.

LED: One Lithonia Way Conyers, GA 30012 Phone: 800-858-7763 Fax: 770-929-8789 www.lithonia.com
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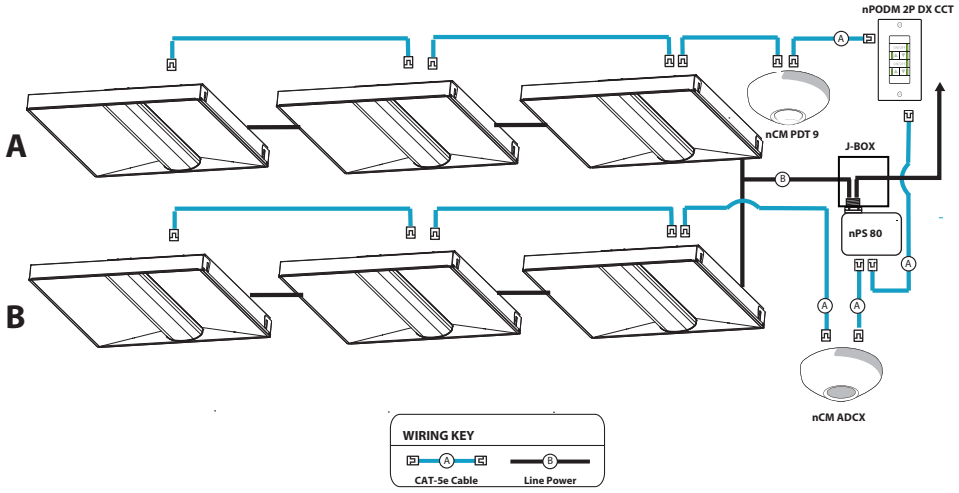
Tunable White Wall Pods

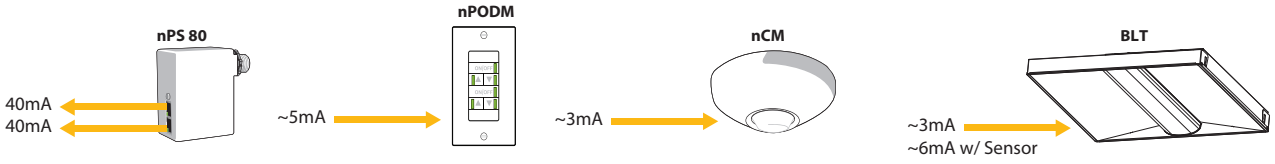
nPODM 2P DX CCT

nPODM 4S DX EDUTW

nPODM 4S EDUTW

Typical nLight network layout with power supply, sensor and wallpod.





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2BLT Tunable White Volumetric Recessed Lighting 2'x4'

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

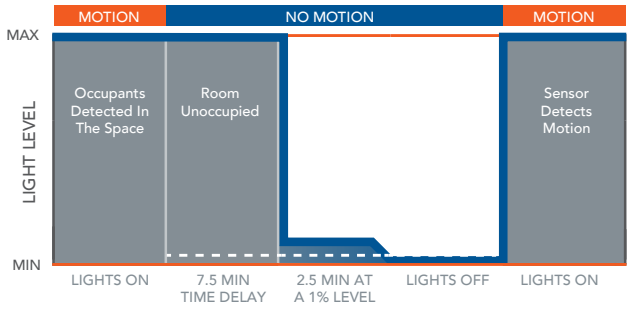
* Requires network to be present for sensors to operate

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

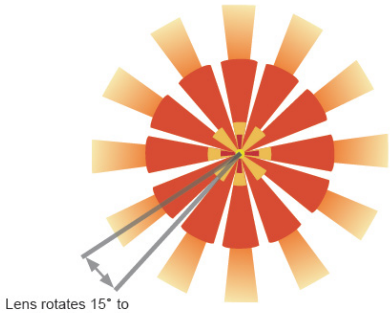


*The presetting on the automatic dimming photocell is 5fc.

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



5.5	18
4.6	15
3.7	12
2.7	9
1.8	6
0.9	3
0 m	0 ft
0.9	3
1.8	6
2.7	9
3.7	12
4.6	15
5.5	18

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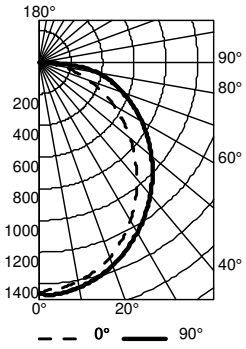
2BLT Tunable White Volumetric Recessed Lighting 2'x4'

PHOTOMETRICS

2BLT4 TUWH PROR 40L ADP LP830, 4250 delivered lumens, test no. LTL28918P231, tested in accordance to IESNA LM-79



CP Summary

	0°	90
0°	1461	1461
5°	1432	1466
15°	1367	1410
25°	1236	1306
35°	1060	1169
45°	857	1010
55°	646	837
65°	438	656
75°	233	471
85°	58	192
90	7	3

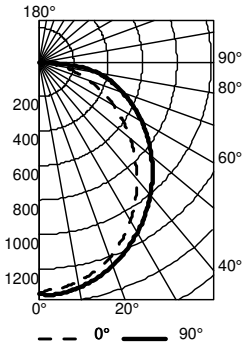
Coefficients of Utilization

RCR	pf 20%	80%			70%			50%		
	pc	70%	50%	30%	50%	30%	10%	50%	30%	10%
	pw									
0		119	119	119	116	116	116	111	111	111
1		108	103	98	100	96	92	96	92	89
2		98	89	82	87	80	75	83	78	73
3		89	78	69	76	68	62	73	66	61
4		81	69	60	67	59	52	65	57	52
5		75	61	52	60	52	45	58	50	44
6		69	55	46	54	46	39	52	45	39
7		64	50	41	49	41	35	48	40	34
8		59	46	37	45	37	31	44	36	31
9		56	42	34	41	33	28	40	33	28
10		52	39	31	38	30	25	37	30	25

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1117	26.3	26.3
0° - 40°	1816	42.7	42.7
0° - 60°	3199	75.3	75.3
0° - 90°	4251	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	4251	100.0	100.0

2BLT4 TUWH PROR 40L ADP LP840, 3910 delivered lumens, test no. LTL28918P235, tested in accordance to IESNA LM-79



CP Summary

	0°	90
0°	1344	1344
5°	1318	1349
15°	1257	1297
25°	1137	1202
35°	975	1075
45°	788	929
55°	594	770
65°	403	604
75°	214	433
85°	53	177
90	6	2

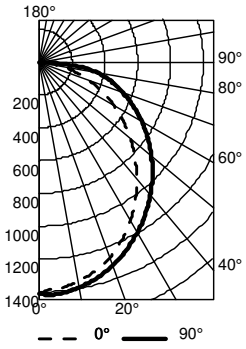
Coefficients of Utilization

RCR	pf 20%	80%			70%			50%		
	pc	70%	50%	30%	50%	30%	10%	50%	30%	10%
	pw									
0		119	119	119	116	116	116	111	111	111
1		108	103	98	100	96	92	96	92	89
2		98	89	82	87	80	75	83	78	73
3		89	78	69	76	68	62	73	66	61
4		81	69	60	67	59	52	65	57	52
5		75	61	52	60	52	45	58	50	44
6		69	55	46	54	46	39	52	45	39
7		64	50	41	49	41	35	48	40	34
8		59	46	37	45	37	31	44	36	31
9		56	42	34	41	33	28	40	33	28
10		52	39	31	38	30	25	37	30	25

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1028	26.3	26.3
0° - 40°	1671	42.7	42.7
0° - 60°	2944	75.3	75.3
0° - 90°	3912	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	3912	100.0	100.0

2BLT4 TUWH PROR 40L ADP LP850, 4102 delivered lumens, test no. LTL28918P239, tested in accordance to IESNA LM-79



CP Summary

	0°	90
0°	1410	1410
5°	1383	1415
15°	1319	1361
25°	1193	1261
35°	1023	1128
45°	827	975
55°	623	808
65°	423	634
75°	225	454
85°	56	186
90	6	3

Coefficients of Utilization

RCR	pf 20%	80%			70%			50%		
	pc	70%	50%	30%	50%	30%	10%	50%	30%	10%
	pw									
0		119	119	119	116	116	116	111	111	111
1		108	103	98	100	96	92	96	92	89
2		98	89	82	87	80	75	83	78	73
3		89	78	69	76	68	62	73	66	61
4		81	69	60	67	59	52	65	57	52
5		75	61	52	60	52	45	58	50	44
6		69	55	46	54	46	39	52	45	39
7		64	50	41	49	41	35	48	40	34
8		59	46	37	45	37	31	44	36	31
9		56	42	34	41	33	28	40	33	28
10		52	39	31	38	30	25	37	30	25

Zonal Lumen Summary

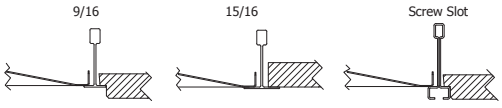
Zone	Lumens	% Lamp	% Fixture
0° - 30°	1078	26.3	26.3
0° - 40°	1753	42.7	42.7
0° - 60°	3088	75.3	75.3
0° - 90°	4104	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	4104	100.0	100.0

Performance Data

Lumen Package	Lumens	Input Watts	LPW
30L ADP LP830	3286	30	110
30L ADP LP840	3026	30	101
30L ADP LP850	3172	30	106
40L ADP LP830	4250	39	108
40L ADP LP840	3910	39	100
40L ADP LP850	4102	39	105
48L ADP LP830	4993	45	111
48L ADP LP840	4594	45	102
48L ADP LP850	4819	45	107
60L ADP LP830	6014	53	114
60L ADP LP840	5534	53	105
60L ADP LP850	5805	53	110

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").

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