LITHONIA LIGHTING®

Catalog Number
Notes
Type

BLT Series LED

BLT Tunable White DC2DC

*DCHUB required (Link)

eldoLED nLIGHT

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

BLT TUWH is compatible with the DC2DC architecture. Acuity Brands' DC2DC architecture enhances the efficiency of LED lighting solutions by eliminating the need and cost to convert AC to DC power at the luminaire. Intrinsically more efficient by design, our DC-powered lighting architecture also delivers savings at design and installation, facilitates maintenance, and empowers lighting design focused on sustainable and well-being applications.

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.

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.

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.

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.

Specifications

Length: 47-3/4 (121.2)

Width: 23-3/4 (60.3)

Depth: 2-3/8" (6)

All dimensions are inches (centimeters) unless otherwise specified.

Multiple Diffuser Options

ADP
Curved Ribbed

ADSM
Curved Smooth

SDP
Square Ribbed

SDSM
Square Smooth

BLT Tunable White DC2DC Volumetric Recessed Lighting

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

BLT Tunable

Series	Dynamic feature	Dynamic range	Lumens	Diffuser	Voltage	Dimming
2BLT4 2x4 BLT	TUWH Tunable white	PROR Productivity range (3000-5000K) RHYR Rhythm range (2700-6500K)[1]	30L 3000 Lumens 40L 4000 Lumens 48L 4800 Lumens 60L 6000 Lumens	ADP Curved, ribbed ADSM Curved, smooth SDP Square, ribbed SDSM Square, smooth **Includes trim rings to match sensored version** ADPT Curved, ribbed ADSMT Curved, smooth SDPT Square, ribbed SDSMT Square, smooth	57V DC (Direct Current)	DALI8 Digital Addressable Lighting Interface, Device Type 8
2BLT2 2x2 BLT			20L 2000 Lumens 33L 3300 Lumens 40L 4000 Lumens			
BLT4 1x4 BLT			20L 2000 Lumens 30L 3000 Lumens 40L 4000 Lumens 48L 4800 Lumens			

Options

LATC	Earthquake clip
90 CRI	90CRI
DWAM	Anti-Microbial paint

Accessories: *Order as separate catalog number.*

DGA24	Drywall grid adapter for 2x4 recessed fixture
DGA14	Drywall grid adapter for 1x4 recessed fixture
DGA22	Drywall grid adapter for 2x2 recessed fixture
2X4SMKSHP PAF	Surface Mount Troffer Kit Post Paint
1X4SMKSHP PAF	Surface Mount Troffer Kit Post Paint
2X2SMKSHP PAF	Surface Mount Troffer Kit Post Paint

Replacement Part Kits: *Order as separate catalog number.*

*237LKE	2DBLT48 ADP LENS ASSEMBLY	4 ft. replacement lens (light traps included)
*237LKL	2DBLT48 SDP LENS ASSEMBLY	4 ft. replacement lens (light traps included)
*237LL2	2DBLT48 ADSM LENS ASSEMBLY	4 ft. replacement lens (light traps included)
*237LLA	2DBLT48 SDSM LENS ASSEMBLY	4 ft. replacement lens (light traps included)
*237LT2	2DBLT48 ADPT LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237LT4	2DBLT48 SDPT LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237LT6	2DBLT48 ADSMT LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237LT8	2DBLT48 SDSMT LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237LTA	2DBLT48 ADPT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237M52	2DBLT48 SDPT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237M5A	2DBLT48 ADSMT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)
*237M5L	2DBLT48 SDSMT SENSOR LENS ASSEMBLY	4 ft. replacement lens (trims included)

DC-powered Lighting, DC2DC Architecture

Acuity Brands' DC2DC architecture provides for distributed low-voltage DC power and digital controls for a range of LED luminaires, including the BLT series.

The DC2DC architecture enhances an LED lighting system's efficiency by eliminating the need and cost to convert AC to DC power at the luminaire and facilitating the installation and commissioning of lighting controls. Intrinsically more efficient by design, our DC-powered lighting architecture also delivers savings at design and installation, facilitates maintenance, and empowers lighting design focused on sustainable and well-being applications.

Components include:

- DCHUB (ordered separately), distributes DC power up to 1080 VA of DC-powered LED luminaires including support for emergency lighting.
- 57 VDC powered LED luminaires, with Static CCT or Tunable White, based on control options.
- nLight® lighting control
  - Integral or offboard wired networked lighting control, with nLight control devices (ordered separately).
  - Embedded nLight AIR wireless devices in 57VDC powered Static CCT LED luminaires.
- Class 2 power and control cables.
- The number of luminaires that can be supported by a single DCHUB port is a function of luminaire wattage and conductor losses. Please refer to the fixture wattages listed and the DCHUB spec sheet for additional details. Alternatively, the LED luminaires can be supplied with an approved, UL Listed, Class 2 power source supplying between 52.3 and 57.0 VDC at the input to the luminaire.

Note:

All luminaires require 57VDC option along with the corresponding Control Input option for DALI or DALI8 external nPS80 DALI 57VDC wired nLight control or NLTAIR2 or NLTAIREM2 embedded wireless lighting control.

When using external wired nLight control, nPS80 DALI 57 VDC is mounted locally with the controlled luminaires. Only 2 #16 AWG (min.) conductors are necessary between the DC power source and the nPS80 DALI controller, and 4 conductors between the controller and the luminaires.

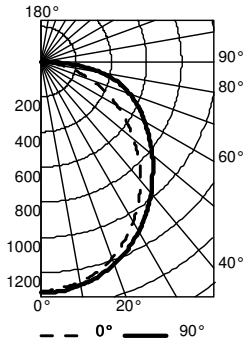
When using nLight embedded wireless controls only 2 #16 AWG (min.) conductors are necessary between the DC power source and the luminaire runs.

One NLTAIR2 Device is used per device address, so if two devices are present in the fixture both will need to be commissioned.

Click DC2DC for more information.

PHOTOMETRICS

2BLT4 TUWH RHYR 40L ADP 57VDC DALI8



CP Summary

	0°	90
0°	1310	1310
5°	1294	1310
15°	1236	1263
25°	1123	1173
35°	970	1046
45°	788	898
55°	594	752
65°	403	614
75°	210	455
85°	47	195
90	1	17

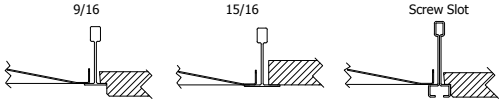
Coefficients of Utilization

pf		20%								
pc		80%			70%			50%		
	pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
RCR	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
	4	81	68	59	67	58	52	64	57	51
	5	74	61	51	60	51	44	57	50	44
	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

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1013	25.6	25.6
0° - 40°	1650	41.7	41.7
0° - 60°	2927	74.0	74.0
0° - 90°	3953	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°	3955	100.0	100.0

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″).

LUMEN OUTPUT

Fixture size	Lumen package	[RHYR] LUMEN OUTPUT PER SCALING PROCEDURE, PER CCT							
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K
2BLT4	2000	1985	1914	1821	1759	1709	1728	1779	1913
	3000	2998	2893	2755	2664	2694	2618	2695	2893
	4000	3955	3835	3678	3574	3580	3525	3617	3849
	4800	4671	4561	4417	4322	4144	4280	4370	4592
	6000	5667	5627	5576	5546	5618	5544	5591	5693

POWER OUTPUT

Fixture size	Lumen package	[RHYR] POWER OUTPUT PER SCALING PROCEDURE, PER CCT									
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K	Device Count	Connected DCHUB Port Wattage
2BLT4	2000	15.5	14.8	13.9	13.2	12.8	12.6	12.8	13.6	2	15.5
	3000	22.9	21.8	20.3	19.2	18.5	18.3	18.8	20.4	2	22.9
	4000	30.9	29.3	27.2	25.7	24.8	24.6	25.3	27.7	2	30.9
	4800	37.5	35.6	33.0	31.2	30.2	29.9	30.7	33.6	2	37.5
	6000	47.7	45.3	42.0	39.7	38.4	38.0	39.1	42.8	2	47.7

LUMENS PER WATT (LPW)

Fixture size	Lumen package	[RHYR] LPW OUTPUT PER SCALING PROCEDURE, PER CCT							
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K
2BLT4	2000	128.0	129.1	131.2	133.3	133.9	137.2	139.1	140.4
	3000	130.7	132.7	135.9	138.9	145.3	142.8	143.4	142.0
	4000	127.9	130.7	135.2	139.0	144.1	143.3	142.8	139.2
	4800	124.5	128.1	133.8	138.5	137.4	143.3	142.1	136.8
	6000	118.8	124.3	132.8	139.7	146.5	145.9	142.9	133.1

LUMENS OUTPUT (LPW)

Fixture size	Lumen package	[RHYR] LUMEN OUTPUT PER SCALING PROCEDURE, PER CCT							
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K
2BLT2	2000	1981	1912	1822	1764	1716	1736	1789	1922
	3000	3292	3184	3043	2951	2994	2909	2994	3207
	4000	3925	3810	3661	3563	3573	3521	3615	3846

POWER OUTPUT

Fixture size	Lumen package	[RHYR] LUMEN OUTPUT PER SCALING PROCEDURE, PER CCT									
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K	Device Count	Connected DCHUB Port Wattage
2BLT2	2000	16.1	15.3	14.3	13.6	13.1	13.0	13.2	14.3	2	16.1
	3000	26.9	25.5	23.6	22.3	21.6	21.4	22.0	24.1	2	26.9
	4000	32.9	31.2	28.8	27.2	26.3	26.1	26.9	29.5	2	32.9

LUMENS PER WATT (LPW)

Fixture size	Lumen package	[RHYR] LPW OUTPUT PER SCALING PROCEDURE, PER CCT							
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K
2BLT2	2000	123.2	124.7	127.4	130.0	130.8	133.8	135.1	134.8
	3000	122.4	124.9	128.8	132.3	138.9	136.2	135.9	132.9
	4000	119.4	122.3	126.9	130.8	135.8	135.1	134.4	130.3

LUMEN OUTPUT

Fixture size	Lumen package	[RHYR] LUMEN OUTPUT PER SCALING PROCEDURE, PER CCT							
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K
1BLT4	2000	1917	1849	1759	1700	1651	1669	1719	1848
	3000	2865	2766	2636	2549	2578	2505	2578	2765
	4000	3782	3668	3519	3420	3427	3373	3461	3680
	4800	5089	4972	4820	4720	4531	4684	4788	5035

LUMENS PER WATT (LPW)

Fixture size	Lumen package	[RHYR] LPW OUTPUT PER SCALING PROCEDURE, PER CCT									
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K	Device Count	Connected DCHUB Port Wattage
1BLT4	2000	15.9	15.2	14.3	13.5	13.1	12.9	13.1	14.0	2	15.9
	3000	23.7	22.5	20.9	19.8	19.1	18.9	19.4	21.0	2	23.7
	4000	31.9	30.2	28.0	26.5	25.6	25.4	26.1	28.5	2	31.9
	4800	42.5	40.3	37.3	35.2	34.0	33.7	34.8	38.2	2	42.5

LUMEN OUTPUT

Fixture size	Lumen package	[RHYR] LUMEN OUTPUT PER SCALING PROCEDURE, PER CCT							
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K
1BLT4	2000	120.3	121.5	123.4	125.5	126.0	129.0	130.8	131.9
	3000	121.1	123.0	126.1	128.9	134.9	132.5	133.1	131.7
	4000	118.6	121.3	125.5	129.1	133.9	133.0	132.7	129.2
	4800	119.8	123.5	129.3	134.1	133.3	139.0	137.6	131.7