LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

BLT Series LED

2BLT4 Tunable White

2' x 4'
LED

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.

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 — 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 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. 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-5e cabling. Unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission.

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-5e 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 and the Rhythm Range of 2700K to 6500K. 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 2-3/8" 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

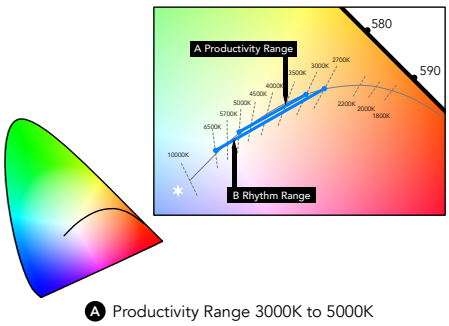
NOTE: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

Tunable White GPHD

- **Gamut**: One dimensional Warm-Cool
- **Path**: Direct 3000K to 5000K (Productivity Range) or 2700K to 6500K (Rhythm Range)
- **Handle**: Two Natural Language Handles: Intensity and CCT
- **Data**: nLight with nTune technology for both handles of control



A Productivity Range 3000K to 5000K

B Rhythm Range 2700K to 6500K

A+ 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 Tunable White Volumetric Recessed Lighting 2'x4'

A+ Capable options indicated by this color background.

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[2]**	**Diffuser**	**Voltage**	**Control interface type**
2BLT4 2x4 BLT	TUWH Tunable white	PROR Productivity range (3000-5000K) RHYR Rhythm range (2700-6500K)[1]	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[3]	NLT nLight nTune interface[4] NLTEMG nLight nTune Interface. For use with generator supply EM power.

Occupancy control[5]

(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

Options

BDP	Disconnect Plug
E7W	7W Emergency battery pack, constant power, Certified in CA Title 20 MAEDBS, User selectable Self-Diagnostic, AC Activate with Integral Test Switch (LINK) ‡
E10W	10W Emergency battery pack, constant power, Certified in CA Title 20 MAEDBS, User selectable Self-Diagnostic, AC Activate with Integral Test Switch (LINK) ‡
BGTD	Bodine Generator Transfer Device[7]
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[8]
GMF	Slow-blowing fuse[8]
NPLT	Narrow pallet
RRL_	RELOC®-ready luminaire[9]
LATC	Earthquake clip
DWAM	Anti-Microbial paint
90CRI	90 CRI
JP14	Job Packaging[10]
JP18	Job Packaging[11]

Accessories: *Order as separate catalog number.*

DGA24	Drywall grid adapter for 2x4 recessed fixture
2X4SMKSHP PAF	Surface Mount Troffer Kit Post Paint
RK8BDP 2P U	Disconnect Plug (BDP), 2 Pole, Package of 1
RK8BDP 3P U	Disconnect Plug (BDP), 3 Pole, Package of 1
RK8BDP 2P J10	Disconnect Plug (BDP), 2 Pole, Package of 10
RK8BDP 2P J40	Disconnect Plug (BDP), 2 Pole, Package of 40

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	CAT-5e 10FT J1
		30' cable	CAT-5e 30FT J1
Power Supply			
nLight Power Supply	nPS 80		

Replacement Parts: *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)

Notes

1 Only RHYR versions are DLC listed.
2 Approximate lumen output.
3 Not available with E7W or E10W battery packs.
4 Requires power from nLight network bridge or nPS 80.
5 Must specify diffuser with trims rings. See sensor options in ordering information.
6 When using pre-wire option, use PWS1846.
7 Must specify voltage. Requires BSE labeling. Consult factory for options.
8 Must specify voltage, 120 or 277 with GLR & GMF fusing.
9 For ordering logic consult: RRL_2013.
10 Only available with controls options: NES7, NESPDT7, NES7ADCX or NESPDT7ADCX.
11 Not available with controls options: NES7, NESPDT7, NES7ADCX or NESPDT7ADCX.

LITHONIA LIGHTING®

MAINSTREAM DYNAMIC BY ACUITY BRANDS

2BLT-2X4-NTUNE

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2BLT Tunable White Volumetric Recessed Lighting 2'x4'

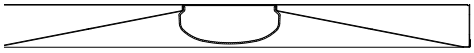
Specifications

Length: 47-3/4 (121.2)

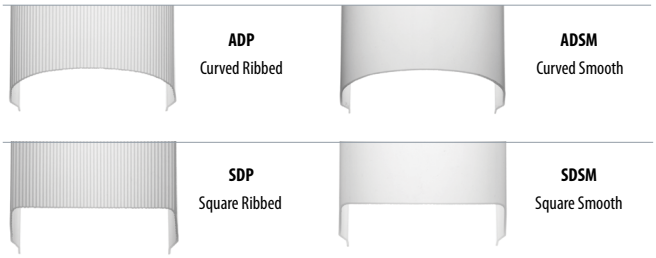
Width: 23-3/4 (60.3)

Depth: 2-3/8" (6)

All dimensions are inches (centimeters) unless otherwise specified.



Multiple Diffuser Options



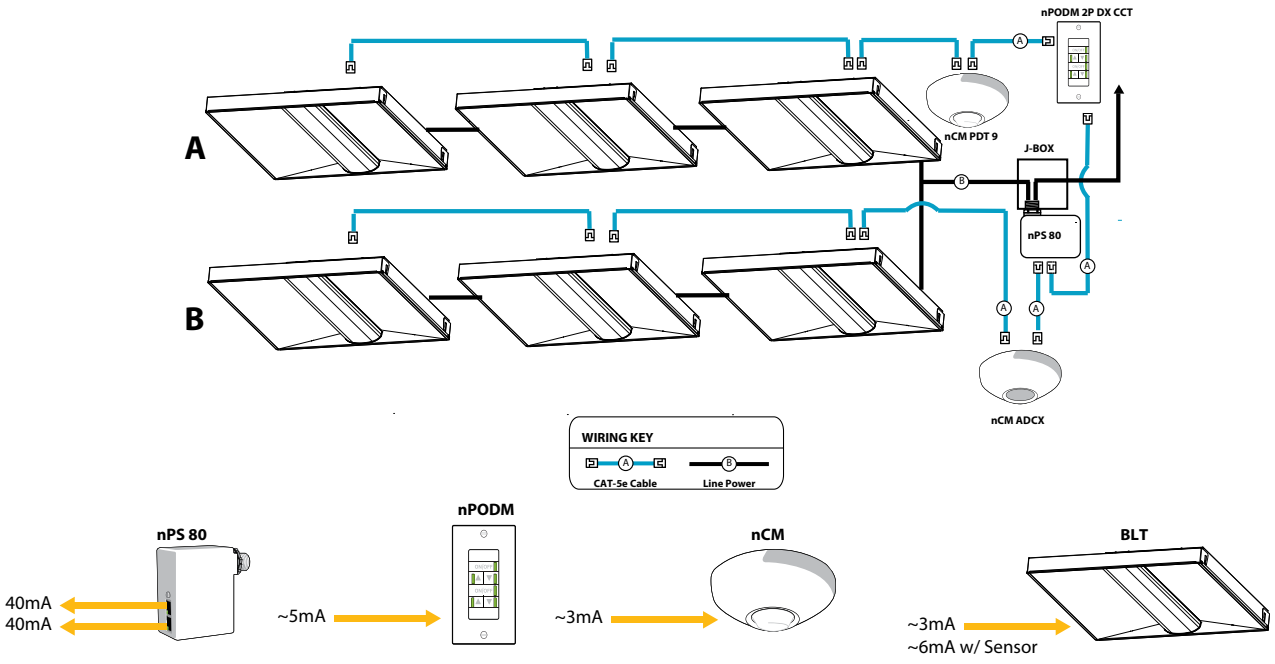
Tunable White Wall Pods

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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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

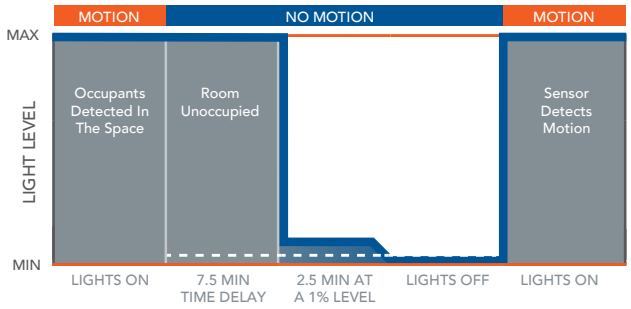
* Requires network to be present for sensors to operate

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

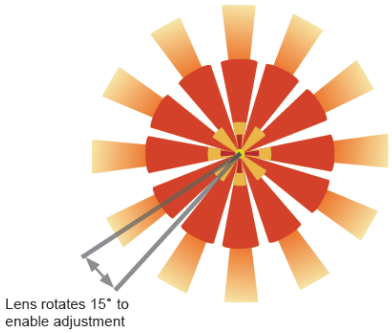


*The presetting on the automatic dimming photocell is 5fc.

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



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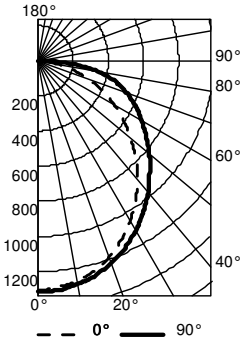
2BLT Tunable White Volumetric Recessed Lighting 2'x4'

PHOTOMETRICS

2BLT4 TUWH RHYR 40L ADP @2700K, 82CRI,



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

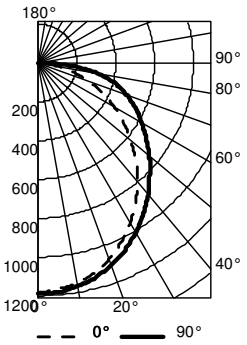
Coefficients of Utilization

	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

2BLT4 TUWH RHYR 40L ADP @4500K, 82CRI,



CP Summary

	0°	90
0°	1185	1185
5°	1171	1186
15°	1119	1144
25°	1017	1062
35°	878	947
45°	713	813
55°	537	681
65°	365	555
75°	190	412
85°	43	176
90	1	15

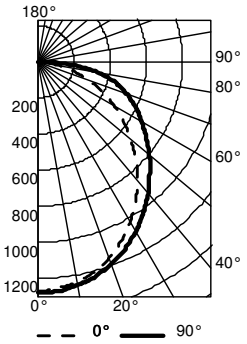
Coefficients of Utilization

	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°	917	25.6	25.6
0° - 40°	1494	41.7	41.7
0° - 60°	2649	74.0	74.0
0° - 90°	3578	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°	3580	100.0	100.0

2BLT4 TUWH RHYR 40L ADP @6500K, 82CRI,



CP Summary

	0°	90
0°	1275	1275
5°	1259	1275
15°	1203	1230
25°	1093	1142
35°	944	1018
45°	767	874
55°	578	732
65°	392	597
75°	204	443
85°	46	190
90	1	16

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°	986	25.6	25.6
0° - 40°	1606	41.7	41.7
0° - 60°	2848	74.0	74.0
0° - 90°	3847	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°	3849	100.0	100.0

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2BLT Tunable White Volumetric Recessed Lighting 2'x4'

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

DLC information is subject to change, for the most up-to-date information please refer to www.designlights.org. Above listings do not cover 347v.

POWER OUTPUT

Fixture size	Lumen package	[RHYR] POWER OUTPUT PER SCALING PROCEDURE, PER CCT							
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K
2BLT4	2000	16.50	15.77	14.77	14.04	13.58	13.40	13.61	14.50
	3000	24.40	23.20	21.57	20.41	19.72	19.50	19.99	21.68
	4000	32.89	31.21	28.95	27.35	26.43	26.17	26.94	29.42
	4800	39.90	37.87	35.13	33.20	32.09	31.78	32.71	35.72
	6000	50.74	48.15	44.67	42.22	40.80	40.42	41.63	45.49

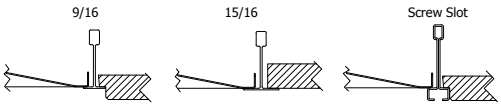
DLC information is subject to change, for the most up-to-date information please refer to www.designlights.org. Above listings do not cover 347v.

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	120	121	123	125	126	129	131	132
	3000	123	125	128	131	137	134	135	133
	4000	120	123	127	131	135	135	134	131
	4800	117	120	126	130	129	135	134	129
	6000	112	117	125	131	138	137	134	125

DLC information is subject to change, for the most up-to-date information please refer to www.designlights.org. Above listings do not cover 347v.

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").

How to Calculate Delivered Lumens in Emergency Mode
Use the formula below to determine the delivered lumens in emergency mode
Delivered Lumens = 1.25 x P x LPW
P = Ouput power of emergency driver. P = 10W for E10WLCP option.
LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.
LPW = Lumen per watt rating of the luminaire. LPW information available in Performance Data section.

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