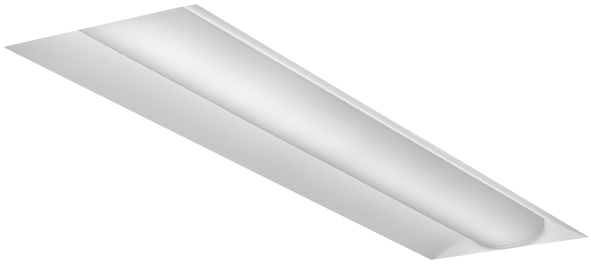
LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

BLT Series LED

BLT4 Tunable White

1' 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: 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.

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-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.

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.

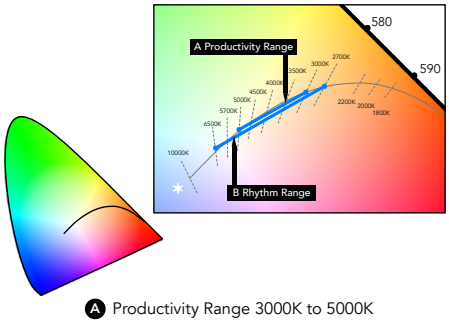
LISTINGS — CSA Certified to meet U.S. and Canadian standards. IC rated.

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

BLT Tunable White Volumetric Recessed Lighting 1'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: BLT4 TUWH PROR 30L ADP NLT

BLT4

Series	Dynamic feature	Dynamic range	Lumens[1]	Diffuser	Voltage	Control interface type
BLT4 1x4 BLT	TUWH Tunable white	PROR Productivity range (3000-5000K)	20L 2000	ADP Curved, linear prisms	(blank) MVOLT	NLT nLight nTune interface[3]
		RHYR Rhythm range (2700-6500K)	30L 3000	ADSM Curved, smooth	120 120	NLTEMG nLight nTune Interface. For use with generator supply EM power.
			40L 4000	SDP Square, linear prisms	277 277	
			48L 4800	SDSM Square, smooth	347 347[2]	
			60L 6000	**Diffusers w/ trim rings**		
				ADPT Curved, linear prisms		
				ADSMT Curved, smooth		
				SDPT Square, linear prisms		
				SDSMT Square, smooth		

Occupancy control[4]

(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
EL7L	700 lumen battery pack (Noncompliant with CA T20) [5]
EL14L	1400 lumen battery pack (Noncompliant with CA T20) [5]
E10WLCP	EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS [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
90CRI	90 CRI

Accessories: *Order as separate catalog number.*

DGA14	Drywall grid adapter for 1x4 recessed fixture
1X4SMKSHP 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	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 SLD, EL7L, EL14L, or E10WLCP 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 Must specify voltage. 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.

LITHONIA LIGHTING®

MAINSTREAM DYNAMIC BY ACUITY BRANDS®

BLT-1X4-NTUNE

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BLT Tunable White Volumetric Recessed Lighting 1'x4'

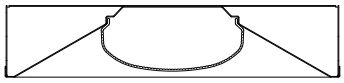
Specifications

Length: 47-3/4 (121.2)

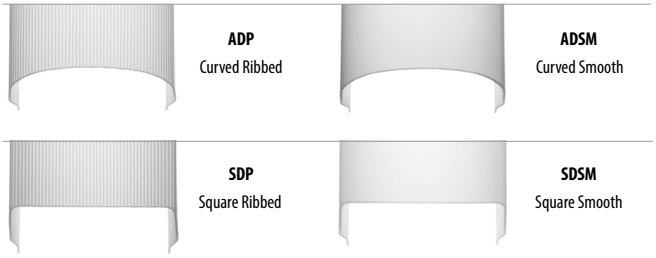
Width: 11-3/4 (29.8)

Depth: 2-3/8" (6)

All dimensions are inches (centimeters) unless otherwise specified.



Multiple Diffuser Options



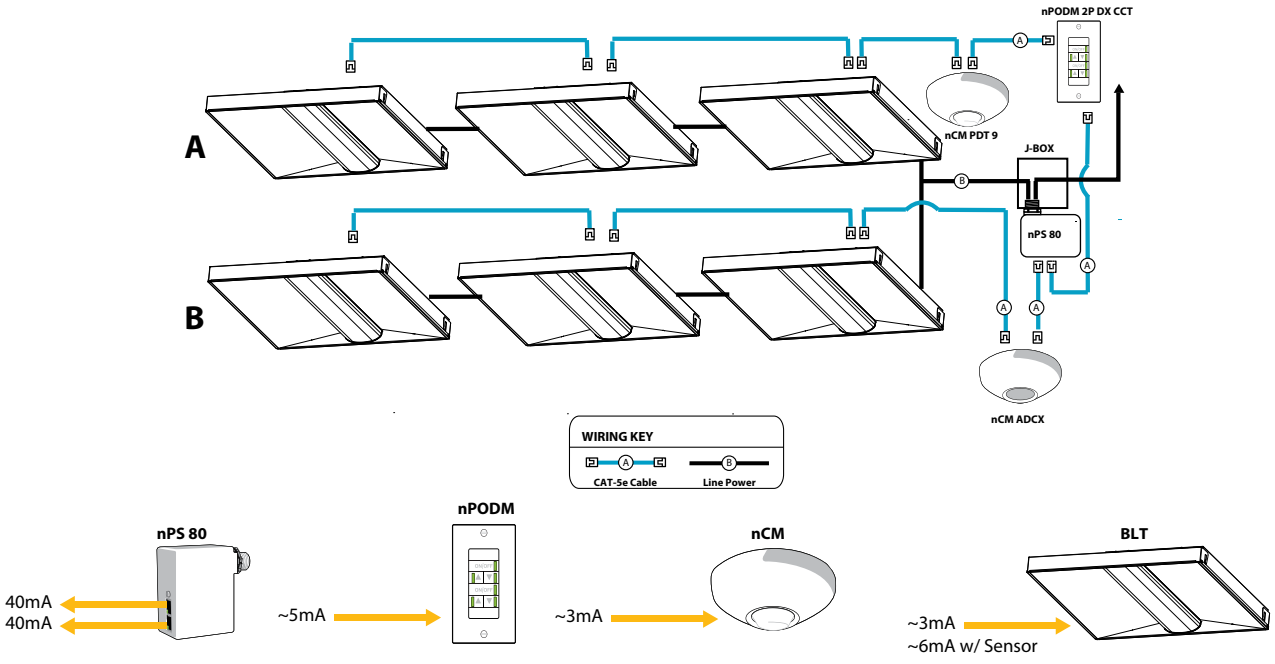
Tunable White Wall Pods

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

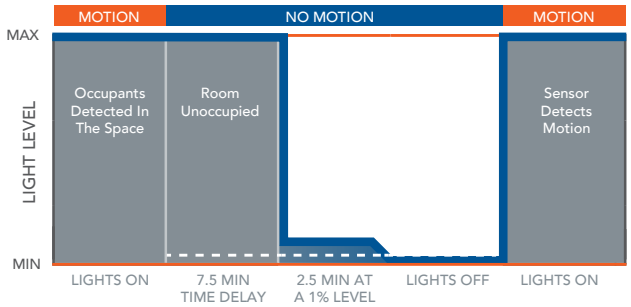
* Requires network to be present for sensors to operate

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

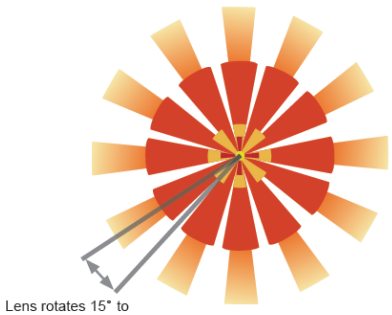


*The presetting on the automatic dimming photocell is 5fc.

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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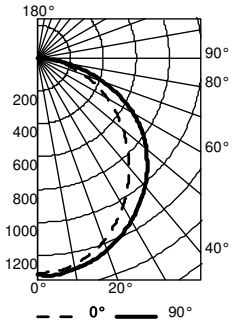
PHOTOMETRICS

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



CP Summary

	0°	90
0°	1313	1313
5°	1299	1323
15°	1235	1278
25°	1113	1195
35°	955	1080
45°	775	943
55°	586	773
65°	395	559
75°	208	301
85°	51	61
90	0	0

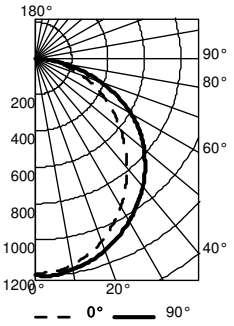
Coefficients of Utilization

	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	109	104	99	101	97	94	97	94	91
	2	98	90	83	88	82	76	85	79	74
	3	90	79	71	77	70	63	74	68	62
	4	82	70	61	68	60	54	66	59	53
	5	75	62	53	61	53	46	59	51	46
	6	69	56	47	55	46	40	53	46	40
	7	64	51	42	50	41	35	48	41	35
	8	60	46	38	46	37	32	44	37	31
	9	56	42	34	42	34	28	41	33	28
	10	52	39	31	39	31	26	38	31	26

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1013	26.8	26.8
0° - 40°	1653	43.7	43.7
0° - 60°	2936	77.6	77.6
0° - 90°	3781	100.0	100.0
90° - 120°	0	0.0	0.0
90° - 130°	0	0.0	0.0
90° - 150°	0	0.0	0.0
90° - 180°	0	0.0	0.0
0° - 180°	3781	100.0	100.0

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



CP Summary

	0°	90
0°	1190	1190
5°	1177	1199
15°	1119	1158
25°	1008	1083
35°	865	978
45°	702	854
55°	531	701
65°	358	506
75°	188	273
85°	46	55
90	0	0

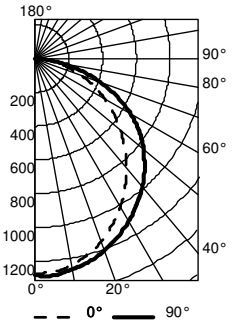
Coefficients of Utilization

	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	109	104	99	101	97	94	97	94	91
	2	98	90	83	88	82	76	85	79	74
	3	90	79	71	77	70	63	74	68	62
	4	82	70	61	68	60	54	66	59	53
	5	75	62	53	61	53	46	59	51	46
	6	69	56	47	55	46	40	53	46	40
	7	64	51	42	50	41	35	48	41	35
	8	60	46	38	46	37	32	44	37	31
	9	56	42	34	42	34	28	41	33	28
	10	52	39	31	39	31	26	38	31	26

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	918	26.8	26.8
0° - 40°	1498	43.7	43.7
0° - 60°	2660	77.6	77.6
0° - 90°	3427	100.0	100.0
90° - 120°	0	0.0	0.0
90° - 130°	0	0.0	0.0
90° - 150°	0	0.0	0.0
90° - 180°	0	0.0	0.0
0° - 180°	3427	100.0	100.0

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



CP Summary

	0°	90
0°	1278	1278
5°	1264	1287
15°	1202	1243
25°	1083	1163
35°	929	1051
45°	754	917
55°	570	753
65°	384	544
75°	202	293
85°	49	59
90	0	0

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	109	104	99	101	97	94	97	94	91
	2	98	90	83	88	82	76	85	79	74
	3	90	79	71	77	70	63	74	68	62
	4	82	70	61	68	60	54	66	59	53
	5	75	62	53	61	53	46	59	51	46
	6	69	56	47	55	46	40	53	46	40
	7	64	51	42	50	41	35	48	41	35
	8	60	46	38	46	37	32	44	37	31
	9	56	42	34	42	34	28	41	33	28
	10	52	39	31	39	31	26	38	31	26

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	986	26.8	26.8
0° - 40°	1609	43.7	43.7
0° - 60°	2857	77.6	77.6
0° - 90°	3680	100.0	100.0
90° - 120°	0	0.0	0.0
90° - 130°	0	0.0	0.0
90° - 150°	0	0.0	0.0
90° - 180°	0	0.0	0.0
0° - 180°	3680	100.0	100.0

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BLT Tunable White Volumetric Recessed Lighting 1'x4'

LUMEN OUTPUT

Fixture size	Lumen package	[RHYR] LUMEN OUTPUT PER SCALING PROCEDURE, PER CCT									PROR				
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K		3000K	3500K	4000K	4500K	5000K
BLT4	2000	1917	1849	1759	1700	1651	1669	1719	1848		1999	1868	1824	1868	2000
	3000	2865	2766	2636	2549	2578	2505	2578	2765		3012	2780	2696	2755	2960
	4000	3782	3668	3519	3420	3427	3373	3461	3680		3976	3657	3533	3602	3864
	4800	5089	4972	4820	4720	4531	4684	4788	5035		4717	4366	4230	4309	4606
	6000	6217	6189	6157	6142	5190	6155	6198	6286		5789	55222	5429	5509	5762

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									PROR				
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K		3000K	3500K	4000K	4500K	5000K
BLT4	2000	16.95	16.19	15.16	14.41	13.94	13.76	13.98	14.91		15.35	13.95	13.29	13.35	14.14
	3000	25.16	23.92	22.24	21.04	20.33	20.11	20.60	22.34		23.44	20.65	19.42	19.76	21.65
	4000	33.91	32.17	29.84	28.19	27.23	26.97	27.75	30.31		31.91	27.88	26.09	26.54	29.24
	4800	45.20	42.83	39.66	37.44	36.17	35.86	37.03	40.67		39.93	34.96	32.72	33.20	36.41
	6000	59.80	56.59	52.29	49.29	47.61	47.23	48.91	53.95		50.97	44.75	41.92	42.49	46.46

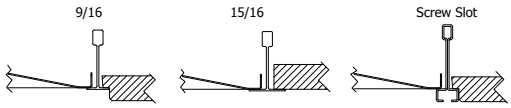
DLC information is subject to change, for the most up-to-date information please refer to www.designlights.org. Above listings do not cover 347v.

LUMENS PER WATT (LPW)

Fixture size	Lumen package	[RHYR] LPW OUTPUT PER SCALING PROCEDURE, PER CCT									PROR				
		2700K	3000K	3500K	4000K	4500K	5000K	5700K	6500K		3000K	3500K	4000K	4500K	5000K
BLT4	2000	113	114	116	118	118	121	123	124		130	134	137	140	141
	3000	114	116	210	121	127	125	125	124		128	135	139	139	137
	4000	112	114	118	121	126	125	125	121		125	131	135	136	132
	4800	113	116	122	126	125	131	129	124		118	125	129	130	126
	6000	104	109	118	125	109	130	127	117		114	1234	129	130	124

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 12-3/4" 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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