

FEATURES & SPECIFICATIONS

INTENDED USE —The T Series LED combines digital lighting and control technologies with a high-performance optical system to deliver general ambient lighting for many applications such as schools, offices and hospitals.

High-efficacy light engine delivers long life and excellent color, ensuring a superior quality lighting installation that is highly efficient and sustainable. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate.** [Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.](#)

CONSTRUCTION — Housing formed from cold-rolled steel. Polyester powder-paint after fabrication option available.

Smooth hemmed sides and smooth inward-formed end flanges, for easy handling.

Standard extruded aluminum door frame has superior structural integrity with premium appearance and mitered corners. Powder-painted rotary cam latches provide easy, secure door closure. Integral T-bar clips are standard. Acrylic shielding material is 100% UV stabilized.

OPTICS — Standard pattern #19 lens, 0.156" thick with highly transmissive overlay, is standard for superior brightness control. Overlay is 0.040" thick. Other lenses are available.

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide superior level and quality of illumination for extended service life. 90% LED lumen maintenance at 60,000 hours (L90/60,000).

eldoLED driver options deliver choice of dimming range, and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI. Optional nLight® embedded controls continuously monitor system performance, allow for constant lumen management/compensation function, facilitate simple "plug-and-play" network and controls upgrading via Cat-5 cable.

Driver disconnect is provided where required to comply with U.S. and Canadian codes.

INSTALLATION — Drivers and internal components are accessible from floor. LED boards include plug-in connectors for easy replacement or servicing. Suitable for direct insulation contact. Suitable for damp location.

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

BUY AMERICAN ACT — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations.

Please refer to www.acuitybrands.com/buy-american for additional information.

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.

Catalog Number
Notes
Type

T SERIES LED

2TL

2' x 4' LED

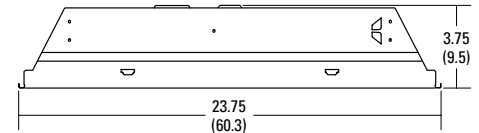


Specifications

Length: 47.75 (121.3)

Width: 23.75 (60.3)

Depth: 3.75 (9.5)



All dimensions are inches (centimeters) unless otherwise noted.

A+ Capable Luminaire

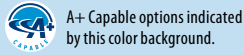
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- 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

2TL 2X4 Recessed LED Lighting



ORDERING INFORMATION

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

Example: 2TL4 40L RW A19 EZ1 LP835 N80

2TL4								
Series		Lumens ¹		Door		Lens	Voltage	
2TL4 Recessed LED 2x4	30L	3000 lumens		FW	Flush aluminum, white	A12	#12 pattern acrylic	(blank) MVOLT (120-277V)
	40L	4000 lumens		RW	Regressed aluminum, white	A19	#19 pattern acrylic, 0.156" thick	347 347V ²
	48L	4800 lumens				MWS	Matte white .040" thick	
	60L	6000 lumens				MPL	Micro prism	
	72L	7200 lumens				SWL	Satin white	

Driver		Color temperature		Control		Options
EZ1	eldoLED dims to 1% (0-10 volt dimming)	LP830	3000 K	(blank)	No controls	EL7L 700 nominal lumen battery pack (Noncompliant with CA T20)
EZB	eldoLED dims to 0.1% (0-10 volt dimming)	LP835	3500 K	N80	nLight with 80% (L80) lumen management	EL14L 1400 nominal lumen battery pack (Noncompliant with CA T20)
GZ1	Dims to 1% (0-10V dimming) ³	LP840	4000 K	N80EMG	nLight with 80% (L80) lumen management for use with generator supply EM power	E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS
GZ10	Dims to 10% (0-10V dimming) ³	LP850	5000 K	N100	nLight without lumen management	CP Chicago plenum ⁴
EDB	eldoLED DALI ⁴			N100EMG	nLight without lumen management for use with generator supply EM power	BAA Buy America(n) Act Compliant
SLD	Step-level dimming ⁴					PAF Paint after fabrication

Accessories: Order as separate catalog number.	
DGA24	Drywall grid adapter for 2x4 recessed fixture.

Notes

- 1 Approximate lumen output.
- 2 Not available with EL7L or EL14L battery packs or SLD driver.
- 3 GZ1, GZ10 drivers not available with any Controls options.
- 4 Not available with N80, N80EMG, N100, or N100EMG. Not available with PWS1836, PWS1846, PWS1856LV, or PWS1846 PWSLV.

Performance Data				
Lumen	Package	Lumens	Input Watts	LPW
30L	LP830	3,010.9	25	120.4
30L	LP835	3,075.5	25	123.0
30L	LP840	3,097.0	25	123.9
30L	LP850	3,204.7	25	128.2
40L	LP830	3,835.1	32	119.8
40L	LP835	3,918.2	32	122.4
40L	LP840	3,945.8	32	123.3
40L	LP850	4,084.2	32	127.6
48L	LP830	4,730.1	40	118.3
48L	LP835	4,831.6	40	120.8
48L	LP840	4,865.4	40	121.6
48L	LP850	5,034.6	40	125.9
60L	LP830	5,431.3	47	115.6
60L	LP835	5,548.2	47	118.0
60L	LP840	5,588.2	47	118.9
60L	LP850	5,785.0	47	123.1
72L	LP830	7,513.4	67	112.1
72L	LP835	7,673.3	67	114.5
72L	LP840	7,728.7	67	115.4
72L	LP850	7,999.3	67	119.4

How to Estimate Delivered Lumens in Emergency Mode

Use the formula below to estimate the delivered lumens in emergency mode

$$\text{Delivered Lumens} = 1.25 \times P \times \text{LPW}$$

P = Output power of emergency driver. P = 10W for E10WLCP option.

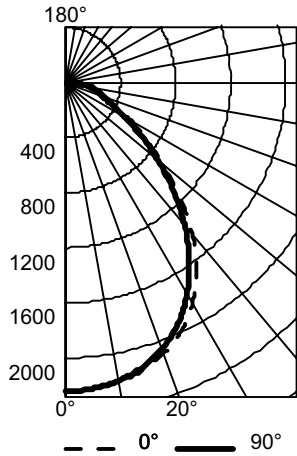
LPW = Lumen per watt rating of the luminaire. LPW information available in Performance Data section.

Performance based on standard #12 pattern acrylic lens.

2TL 2X4 Recessed LED Lighting

PHOTOMETRICS

2TL4 48L FW A12 EZ1 LP840, 4865.4 delivered lumens, test no. LTL26934P10, tested in accordance to IESNA LM-79.



CP Summary		
	0°	90
0°	2239	2239
5°	2234	2231
15°	2163	2144
25°	1990	1933
35°	1661	1569
45°	1174	1109
55°	717	668
65°	403	370
75°	228	240
85°	97	108
90°	0	0

Coefficients of Utilization										
pc	pw	80%		20%			50%			
		70%	50%	30%	50%	30%	10%	50%	30%	10%
		FOR								
0	119	119	119	116	116	116	111	111	111	
1	110	106	102	103	100	97	99	96	94	
2	101	94	88	92	86	81	88	84	80	
3	93	84	76	82	75	70	79	73	69	
4	86	75	67	74	66	61	71	65	60	
5	80	68	60	67	59	53	65	58	53	
6	74	62	53	61	53	47	59	52	47	
7	69	56	48	56	48	42	54	47	42	
8	64	52	44	51	43	38	50	43	38	
9	60	48	40	47	40	35	46	39	34	
10	57	44	37	44	37	32	43	36	32	

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0° - 30°	1713	35.2	35.2
0° - 40°	2710	55.7	55.7
0° - 60°	4192	86.2	86.2
0° - 90°	4865	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°	4865	100.0	100.0

Constant Lumen Management

Enabled by the embedded nLight control, the T Series LED 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.

