

FEATURES & SPECIFICATIONS

INTENDED USE — The ACL Series LED combines digital LED 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**. Housing is **painted after fabrication** for superior finish.

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

Standard **deep regressed door frame** with step baffles provides unique architectural appearance. Powder painted rotary cam latches provide easy secure door closure. Integral T-bar clips standard. Acrylic shielding material 100% UV stabilized.

OPTICS — Frosted acrylic tile provides superior efficiency and a clean quite appearance in the ceiling.

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

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

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

INSTALLATION — **Drivers and internal components 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 meet U.S. and Canadian standards. **IC rated.**

Protected by one or more of US Patent Nos. D677,817; D677,819.

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

ACL SERIES LED

2ACL

2' x 4' LED



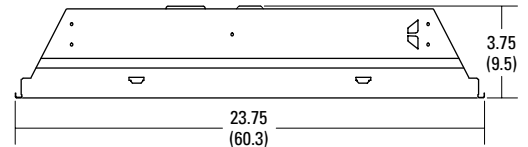
eldoLED



DIMENSIONS

All dimensions are inches (centimeters) unless otherwise noted.

Specifications
 Length: 47.75 (121.3)
 Width: 23.75 (60.3)
 Depth: 3.75 (9.5)



CSA+ 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

2ACL Recessed LED Lighting



A+ Capable options indicated by this color background.

ORDERING INFORMATION

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

Example: 2ACL4 48L EZ1 LP835 N100

2ACL4			
Series	Lumens ¹	Voltage	Driver
2ACL4 Recessed LED 2x4	30L 3000 lumens 40L 4000 lumens 48L 4800 lumens 60L 6000 lumens 72L 7200 lumens	(blank) MVOLT (120-277V) 347 347V ²	EZ1 eldoLED dims to 1% (0-10 volt dimming) EZB eldoLED dims to dark (0-10 volt dimming) GZ1 Dims to 1% (0-10V dimming) ³ GZ10 Dims to 10% (0-10V dimming) ³ EDB eldoLED DALI SLD Step-level dimming ⁴

Color temperature	Control	Options
LP830 3000 K LP835 3500 K LP840 4000 K LP850 5000 K	(blank) No controls N80 nLight with 80% (L80) lumen management N80EMG nLight with 80% (L80) lumen management for use with generator supply EM power N100 nLight without lumen management N100EMG nLight without lumen management for use with generator supply EM power	EL7L 700 nominal lumen battery pack (Noncompliant with CA T20) EL14L 1400 nominal lumen battery pack (Noncompliant with CA T20) E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS PWS1836 6' pre-wire 3/8" diameter, 18 gauge, 1 circuit PWS1846 6' pre-wire 3/8" diameter, 18 gauge, 2 circuit PWS1846 Two cables: one 6' prewire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge PWSLV PWS1856LV 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/ low voltage wires CP Chicago plenum ⁴

nLight® Control Accessories:

Order as separate catalog number. Visit www.sensorswitch.com/nLight for complete listing of nLight controls.

WallPod stations	Model number	Occupancy sensors	Model number
On/Off	nPODM [color]	Standard range 360°, ceiling (PIR / dual tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPODM DX [color]	Extended range 360°, ceiling (PIR / dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX	Wide view (PIR / dual tech)	nWV 16 / nWV PDT 16
Photocell controls	Model number	Cat-5 cable bundles (plenum rated)	Model number
Continuous dimming	nCM ADC	10', 15 pieces per bundle	CATS 10FT
On/Off & Dimming	nCM PC ADC	30', 15 pieces per bundle	CATS 30FT

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 not available with any Controls options.
- 4 Not available with N80, N80EMG, N100, N100EMG, PWS1836, PWS1846, PWS1846 PWSLV or PWS1856LV.

2ACL Recessed LED Lighting

Performance Data				
Lumen	Package	Lumens	Input Watts	LPW
30L	LP830	3,146.8	25	125.9
30L	LP835	3,214.3	25	128.6
30L	LP840	3,236.8	25	129.5
30L	LP850	3,349.3	25	134.0
40L	LP830	4,011.5	32	125.4
40L	LP835	4,098.3	32	128.1
40L	LP840	4,127.2	32	129.0
40L	LP850	4,271.9	32	133.5
48L	LP830	4,940.4	40	123.5
48L	LP835	5,046.5	40	126.2
48L	LP840	5,081.9	40	127.0
48L	LP850	5,261.9	40	131.5
60L	LP830	5,679.7	47	120.8
60L	LP835	5,801.9	47	123.4
60L	LP840	5,843.7	47	124.3
60L	LP850	6,049.4	47	128.7
72L	LP830	7,859.0	68	115.6
72L	LP835	8,026.2	68	118.0
72L	LP840	8,084.0	68	118.9
72L	LP850	8,366.9	68	123.0

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.

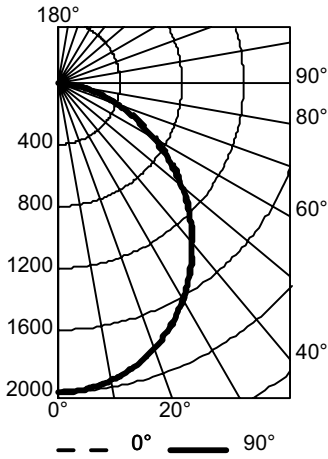
LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

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

2ACL Recessed LED Lighting

PHOTOMETRICS

2ACL4 48L EZ1 LP840, 5081.9 delivered lumens, test no. LTL26933P10, tested in accordance to IESNA LM-79.



CP Summary			Coefficients of Utilization									Zonal Lumen Summary					
	0°	90°	pf	80%			70%			50%			Zone	Lumens	% Lamp	% Fixture	
			pc	70%	50%	30%	50%	30%	10%	50%	30%	10%					
	0°	2000	2000	0	119	119	119	116	116	116	111	111	111	0° - 30°	1519	29.9	29.9
	5°	1986	1992	1	109	105	101	103	99	96	98	95	93	0° - 40°	2448	48.2	48.2
	15°	1905	1902	2	100	92	85	90	84	79	87	82	77	0° - 60°	4171	82.1	82.1
	25°	1739	1730	3	91	81	73	80	72	66	77	70	65	0° - 90°	5082	100.0	100.0
	35°	1504	1486	4	84	72	64	71	63	57	68	61	56	90° - 120°	0	0.0	0.0
	45°	1221	1202	5	77	65	56	64	55	49	61	54	49	90° - 130°	0	0.0	0.0
	55°	911	876	6	71	58	50	57	49	43	56	48	43	90° - 150°	0	0.0	0.0
	65°	591	545	7	66	53	44	52	44	38	51	43	38	90° - 180°	0	0.0	0.0
	75°	300	253	8	62	48	40	48	40	34	46	39	34	0° - 180°	5082	100.0	100.0
	85°	66	30	9	58	45	36	44	36	31	43	36	31				
	90°	0	0	10	54	41	33	41	33	28	40	33	28				

Constant Lumen Management

Enabled by the embedded nLight control, the ACL Series LED actively tracks its run-time and manages its light source such that constant lumen output is maintained over system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.

