

## FEATURES & SPECIFICATIONS

**INTENDED USE** — The AL combines clean, fine lines with a unique design that complements any space. The CTRF (Center Fill) option features a center mounted LED source shielded by the secondary refractor that creates a gradient along the luminaire aperture, accentuating the concave primary lens.

Ideal for office spaces, conference rooms, and schools.

**CONSTRUCTION** — Rugged, pre-painted one-piece cold-rolled steel reflector assembly with embossed steel for increased structural integrity and strength. Polyester powder-paint after fabrication option available. Hinged door/frame assembly retains optical assembly and easy access to electrical components. End plates include integral T-bar clips.

**OPTICS** — Luminous optical system consists of a unique blend of high performance transmittance diffuser coupled with a concave, clear, ribbed refractor for a unique multi-step appearance. To improve fixture performance and eliminate pixilation the diffuser uses a unique blend of high molecular weight polymer beads with unrelated refractive index.

**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).

nLight® embedded 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 AL luminaires using standard Cat-5 cabling. Unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission. Lumen Management: Unique lumen management system (option N80) provides onboard intelligence that actively manages the LED light source so that constant lumen output is maintained over the system life, preventing the energy waste created by the traditional practice of over-lighting.

Step-level dimming option allows system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.

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** — Lightweight and easy to install in any standard T-Bar system.

Maintenance: LED boards include plug-in connectors for easy replacement or servicing.

Suitable for damp locations.

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

DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

Tested to LM80 standards.

**WARRANTY** — 5-year limited warranty. Complete warranty terms located at:

[www.acuitybrands.com/support/customer-support/terms-and-conditions](http://www.acuitybrands.com/support/customer-support/terms-and-conditions)

**Note:** Specifications subject to change without notice.

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.

Catalog Number
Notes
Type

# 2ALL2 CTRF



2' X 2'  
LED



eldoLED



Patent No.: US D680,254 S

## DIMENSIONS

All dimensions are in inches (centimeters) unless otherwise specified.

*Specifications*

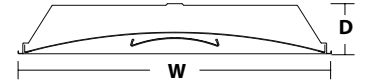
Length: 24 (61.0)

Width: 24 (61.0)

Depth: 3-3/4 (9.5)

Approximate Weight: 12 lbs

Approximate Weight with EM battery: 13.5 lbs



### CSA+ Capable Luminaire

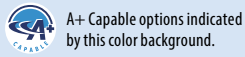
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- 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](http://www.acuitybrands.com/aplus).

\*See ordering tree for details

# 2ALL2 CTRF Architectural Lighting 2'x2'



## ORDERING INFORMATION

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

**Example:** 2ALL2 CTRF 40L EZ1 LP835 N100

2ALL2 CTRF			
Series	Lumens <sup>1</sup>	Voltage	Driver
2ALL2 CTRF Recessed 2x2, center fill LED	20L 2000 lumens 33L 3300 lumens 40L 4000 lumens	(blank) MVOLT (120-277V) 347 347V <sup>2</sup>	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) <sup>3</sup> GZ10 Dims to 10% (0-10V dimming) <sup>3</sup> EDB eldoLED DALI <sup>4</sup> SLD Step-level dimming <sup>4</sup>

Color temperature	Control	Options
LP830 80CRI, 3000 K LP835 80CRI, 3500 K, LP840 80CRI, 4000 K LP850 80CRI, 5000 K LP930 90CRI, 3000 K LP935 90CRI, 3500 K LP940 90CRI, 4000 K LP950 90CRI, 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 CP Chicago plenum PAF Paint after fabrication

nLight® Control Accessories: Order as separate catalog number. Visit <a href="http://www.sensorswitch.com/nLight">www.sensorswitch.com/nLight</a> for complete listing of nLight controls.			
<b>WallPod stations</b>	<b>Model number</b>	<b>Occupancy sensors</b>	<b>Model number</b>
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
<b>Photocell controls</b>	<b>Model number</b>	<b>Cat-5 cable bundles (plenum rated)</b>	<b>Model number</b>
Continuous dimming	nCM ADC	10', CAT5 10FT	CAT5 10FT J1
On/Off & Dimming	nCM PC ADC	15', CAT5 15FT	CAT5 15FT J1

Accessories: Order as separate catalog number.	
DGA22	Drywall ceiling adaptor, unit installation

### Notes

- 1 Approximate lumen output.
- 2 Not available with EL7L, EL14L or E10WLCP battery packs or SLD driver.
- 3 GZ1, GZ10 not available with any Controls options.
- 4 Not available with N80, N80EMG, N100, or N100EMG.

### 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.

Replacement Parts: Order as separate catalog number.				
Part	Description	Includes Door?	Includes Panel Lens?	Includes Center Lens?
DL2ALL2	ALL LED 2X2 Door/ Lens	Yes	Yes	Yes
L2ALL2	ALL LED 2X2 Panel Lens	No	Yes	No
U03611	ALL LED 2X2 Center Lens	No	No	Yes

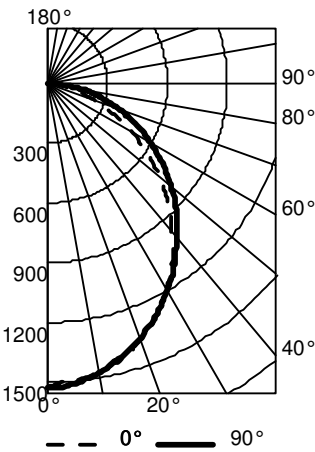
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Performance Data				
Lumen	Package	Lumens	Input Watts	LPW
20L	LP830	2024	17.3	116.8
20L	LP835	2039	17.3	117.6
20L	LP840	2069	17.3	119.4
20L	LP850	2159	17.3	124.5
33L	LP830	3415	30.8	110.8
33L	LP835	3440	30.8	111.6
33L	LP840	3491	30.8	113.2
33L	LP850	3643	30.8	118.1
40L	LP830	4018	37.4	107.5
40L	LP835	4047	37.4	108.3
40L	LP840	4107	37.4	109.9
40L	LP850	4286	37.4	114.7

Performance Data				
Lumen	Package	Lumens	Input Watts	LPW
20L	LP930	1679	17.3	96.9
20L	LP935	1724	17.3	99.5
20L	LP940	1754	17.3	101.2
20L	LP950	1844	17.3	106.4
33L	LP930	2833	30.8	91.9
33L	LP935	2909	30.8	94.3
33L	LP940	2960	30.8	96.0
33L	LP950	3111	30.8	100.9
40L	LP930	3333	37.4	89.2
40L	LP935	3422	37.4	91.6
40L	LP940	3482	37.4	93.2
40L	LP950	3661	37.4	98.0

## PHOTOMETRICS

2ALL2 CTRF 40L EZ1 LP835, 3878.7 delivered lumens.



CP Summary		
	0°	90°
0°	1523	1523
5°	1499	1513
15°	1431	1418
25°	1290	1285
35°	1088	1106
45°	854	912
55°	605	705
65°	357	488
75°	161	280
85°	34	60
90°	1	1

Coefficients of Utilization										
pc	80%			20%			50%			pw
	70%	50%	30%	50%	30%	10%	50%	30%	10%	
0	119	119	119	116	116	116	111	111	111	0
1	109	104	100	102	98	95	98	95	92	1
2	99	91	85	89	83	78	86	81	76	2
3	91	80	72	79	71	65	76	69	64	3
4	83	71	63	70	62	56	68	61	55	4
5	77	64	55	63	55	48	61	53	48	5
6	71	58	49	57	48	42	55	48	42	6
7	66	52	44	52	43	38	50	43	37	7
8	61	48	40	47	39	34	46	39	33	8
9	57	44	36	44	36	30	42	35	30	9
10	54	41	33	40	33	28	39	32	28	10

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0° - 30°	1144	29.5	29.5
0° - 40°	1833	47.3	47.3
0° - 60°	3119	80.4	80.4
0° - 90°	3878	100.0	100.0
90° - 120°	1	0.0	0.0
90° - 130°	1	0.0	0.0
90° - 150°	1	0.0	0.0
90° - 180°	1	0.0	0.0
0° - 180°	3879	100.0	100.0

## Constant Lumen Management

Enabled by the embedded nLight control, the ALL 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.

