LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

RTLED

Volumetric Lighting

2RTL4

2' X 4'
LED

FEATURES & SPECIFICATIONS

INTENDED USE — The RTL combines digital LED lighting and controls technologies with patented high-performance optical design to offer the most advanced luminaire for general-ambient lighting applications. High-efficacy light engine delivers long life and excellent color, ensuring a superior quality lighting installation that is highly efficient and sustainable.

CONSTRUCTION — Rugged, one-piece cold-rolled steel reflector assembly with embossed facets. Coated polyester powder-paint after fabrication.

Rigid structure with ballast box and end plates. End plates include integral T-bar clips.

Impact-modified acrylic prismatic refractor

Luminaires may be mounted end-to-end and continuously wired.

OPTICS — Volumetric illumination is delivered by creating an optimal mix of light to walls, partitions, vertical and horizontal work surfaces — rendering the interior space, objects and occupants in a more balanced, complementary luminous environment.

Light distribution is carefully controlled at high angles, providing just enough luminous flux to create the volumetric effect.

Linear faceted reflector cavity softens and distributes light into the space while minimizing luminous contrast between the fixture and ceiling.

Sloped end plates provide a smooth, luminous transition between fixture and ceiling while enhancing the perception of fixture depth.

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. RTL is rated to deliver L90 performance for 60,000 hours.

Optional 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 RTL 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 choice of 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 accessed via plenum. Driver tray may be removed from fixture during service. Suitable for damp location.

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

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

Tested to LM80 standards. IC rated. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Protected by one or more of US Patent Nos. 7,229,192; D541,467; D541,468; D544,633; D544,634; D544,992. D544,933 and additional patents pending.

WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

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.

Dimensions

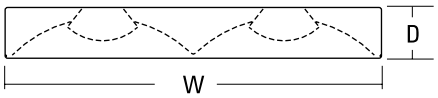
All dimensions are inches (centimeters) unless otherwise specified.

Specifications

Length: 48 (121.9)

Width: 24 (61.0)

Depth: 3-1/8 (7.9)



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

2RTL 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:** 2RTL4 48L EZ1 LP835 N80

2RTL4							
Series	**Air function**	**Lumens**	**Voltage**	**Driver**	**Color temperature**	**Controls[5]**	**Option**
2RTL4 Recessed 2X4 LED	(blank) No air CAS Center air slots (air removal)	30L 3000[1] 40L 4000[1] 48L 4800[1] 60L 6000[1] 72L 7200[1]	(blank) MVOLT (120 - 277V) 347 347[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[3] EXB eldoLED DMX/RDM[3] SLD Step-level dimming[3] EXA1 Dims to 1%, XPoint wireless enabled[3,4] EXAB Dims to dark, XPoint wireless enabled[3,4]	LP830 3000 K, 82 CRI LP835 3500 K, 82 CRI LP840 4000 K, 82 CRI LP850 5000 K, 82 CRI	(blank) No controls N80 nLight with 80% lumen management N80EMG nLight with 80% lumen management for use with generator supply EM power[6] N100 nLight without lumen management N100EMG nLight without lumen management for use with generator supply EM power[6]	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

Accessories: *Order as separate catalog number.*

DGA24	Drywall ceiling adaptor , unit installation
2X4SMKSHP PAF	Multi-Use Surface Mount Kit 2X4 Post-Paint

Notes

1 Approximate lumen output.
2 Not available with EL battery packs or SLD driver.
3 Not available with N80, N80EMG, N100, or N100EMG.
4 Gateway not included. Requires on-site commissioning. Visit www.lightingcontrols.com/XPointWireless for more information.
5 nLight access limitations with EZB.
6 nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.

Performance Data

Lumen Package	Lumens	Input Watts	LPW
30L LP830	3144	24.7	127
30L LP835	3238	24.7	131
30L LP840	3303	24.7	134
30L LP850	3369	24.7	136
40L LP830	4699	39.4	119
40L LP835	4840	39.4	123
40L LP840	4905	39.4	124
40L LP850	5003	39.4	127
48L LP830	5639	47.3	119
48L LP835	5808	47.3	123
48L LP840	5886	47.3	124
48L LP850	6004	47.3	127
60L LP830	6079	49.1	124
60L LP835	6261	49.1	128
60L LP840	6387	49.1	130
60L LP850	6514	49.1	133
72L LP830	7495	59.4	126
72L LP835	7720	59.4	130
72L LP840	7874	59.4	133
72L LP850	8032	59.4	135

How to Estimate Delivered Lumens in Emergency Mode

Use the formula below to estimate 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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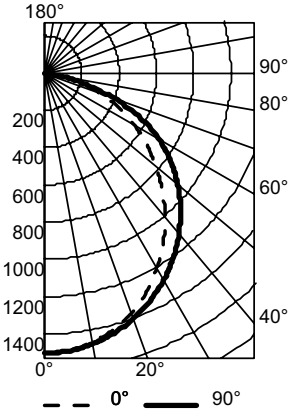
2RTL Volumetric Recessed Lighting 2'x4'

PHOTOMETRICS

2RTL4 40L LP835, 4,118 delivered lumens, test no. LTL25588P4, tested in accordance to IESNA LM-79 .



CP Summary

	0°	90
0°	1499	1499
5°	1492	1497
15°	1425	1443
25°	1294	1345
35°	1111	1207
45°	897	1033
55°	669	826
65°	442	570
75°	226	230
85°	44	16
90	0	0

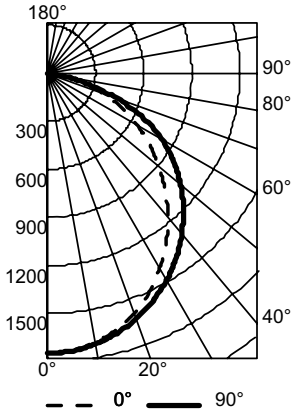
Coefficients of Utilization

RCR	pf	80%			70%			50%		
	pc	20%			20%			20%		
	pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
0		119	119	119	116	116	116	111	111	111
1		109	104	100	102	98	95	98	95	92
2		99	91	84	89	83	78	86	80	76
3		90	80	72	78	71	65	75	69	64
4		83	71	62	70	61	55	67	60	54
5		76	63	54	62	54	48	60	53	47
6		70	57	48	56	48	42	54	47	41
7		65	52	43	51	43	37	49	42	36
8		61	47	39	46	38	33	45	38	33
9		57	43	35	43	35	29	42	34	29
10		53	40	32	39	32	27	38	31	27

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1152	28.0	28.0
0° - 40°	1875	45.5	45.5
0° - 60°	3294	80.0	80.0
0° - 90°	4118	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°	4118	100.0	100.0

2RTL4 48L LP835, 4,786 delivered lumens, test no. LTL25588P8, tested in accordance to IESNA LM-79.



CP Summary

	0°	90
0°	1743	1743
5°	1735	1739
15°	1657	1677
25°	1504	1563
35°	1291	1402
45°	1043	1200
55°	778	960
65°	514	663
75°	262	267
85°	51	19
90	0	0

Coefficients of Utilization

RCR	pf	80%			70%			50%		
	pc	20%			20%			20%		
	pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
0		119	119	119	116	116	116	111	111	111
1		109	104	100	102	98	95	98	95	92
2		99	91	84	89	83	78	86	80	76
3		90	80	72	78	71	65	75	69	64
4		83	71	62	70	61	55	67	60	54
5		76	63	54	62	54	48	60	53	47
6		70	57	48	56	48	42	54	47	41
7		65	52	43	51	43	37	49	42	36
8		61	47	39	46	38	33	45	38	33
9		57	43	35	43	35	29	42	34	29
10		53	40	32	39	32	27	38	31	27

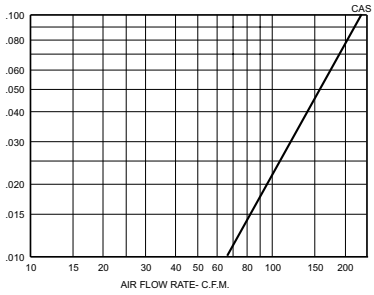
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1339	28.0	28.0
0° - 40°	2179	45.5	45.5
0° - 60°	3828	80.0	80.0
0° - 90°	4786	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°	4786	100.0	100.0

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]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPODM DX [color]	Large motion 360°, ceiling (PIR / dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX	Wall switch with raise/lower	nWSXPDTLVDX
Photocell controls	**Model number**	**Cat-5 cable bundles (plenum rated)**	**Model number**
On/Off & Dimming	nCM ADCX	10', 15 pieces per bundle	CAT5 10FT
		30', 15 pieces per bundle	CAT5 30FT

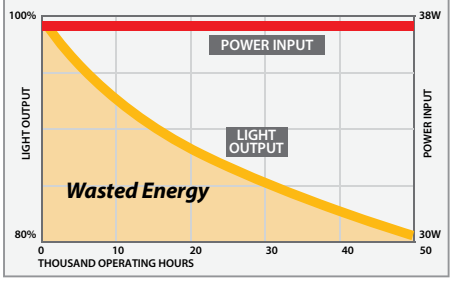
RTL with Air Handling



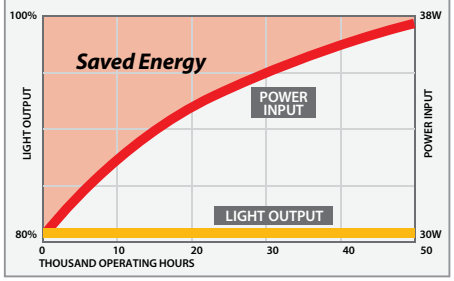
Constant Lumen Management

Enabled by the embedded nLight control, the RTL 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.

Without Lumen Management
Energy is wasted and light level is inconsistent.



With Lumen Management
Energy is saved and light level remains consistent.



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