

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. A typically configured RTL features a Unified Glare Rating (UGR) starting at 17, UGR data available on page 3.

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.

Networked embedded controls: Networked embedded controls by nLight address the requirements of Luminaire Level Lighting Controls (LLLC). Luminaires with networked embedded controls by nLight are designed, manufactured, tested, and shipped with occupancy, daylight sensors or control devices factory-installed. This simplifies design layouts and reduces total installed cost by eliminates field installation of control devices, while addressing code requirements.

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.

BUY AMERICAN ACT — BAA — Buy American Act: This product is available in a version that qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS.

Please refer to www.acuitybrands.com/resources/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.

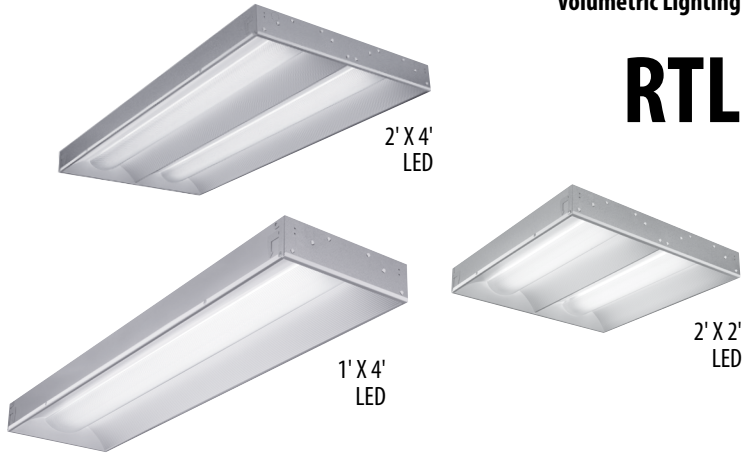
Specifications subject to change without notice.

Catalog Number
Notes
Type



Volumetric Lighting

RTL

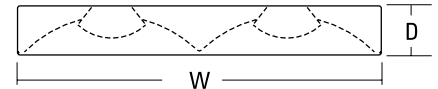


Dimensions

All dimensions are inches (centimeters) unless otherwise specified.

Specifications

Length 1X4, 2X4:	47-3/4" (121.3)
Length 2X2:	23-3/4" (60.3)
Width 2X2, 2X4:	24-3/4" (60.3)
Width 1X4:	11-3/4" (29.8)
Depth 1X4:	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

RTL Volumetric Recessed 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: 2RTL4 48L EZ1 LP835 N80

2RTL4						
Series		Lumens ¹	Air function	Voltage	Driver	Color temperature
RTL4 Recessed 1X4 LED	20L	2000 lumens	(blank) No air CAS Center air slots (air removal)	(blank) MVOLT (120 - 277V) 347 347 ²	EZ1 eldoLED dims to 1% (0-10 volt dimming)	LP830 3000 K, 82 CRI
	30L	3000 lumens			EZB eldoLED dims to 0.1% (0-10 volt dimming)	LP835 3500 K, 82 CRI
	40L	4000 lumens			GZ1 Dims to 1% (0-10V dimming) ³	LP840 4000 K, 82 CRI
	48L	4800 lumens			GZ10 Dims to 10% (0-10V dimming) ³	LP850 5000 K, 82 CRI
	60L	6000 lumens			EDB eldoLED DALI ³	
2RTL2 Recessed 2X2 LED	20L	2000 lumens			SLD Step-level dimming ³	
	33L	3300 lumens				
	40L	4000 lumens				
2RTL4 Recessed 2X4 LED	30L	3000 ¹ lumens				
	40L	4000 ¹ lumens				
	48L	4800 ¹ lumens				
	60L	6000 ¹ lumens				
	72L	7200 ¹ lumens				

Controls ⁴	Option	
(blank) No controls	BDP	Disconnect Plug
N80 nLight with 80% lumen management	E7W	7W Emergency battery pack, constant power, Certified in CA Title 20 MAEDBS, User selectable Self-Diagnostic, AC Activate with Integral Test Switch (LINK)
N80EMG nLight with 80% lumen management for use with generator supply EM power ⁵	E10W	10W Emergency battery pack, constant power, Certified in CA Title 20 MAEDBS, User selectable Self-Diagnostic, AC Activate with Integral Test Switch (LINK)
N100 nLight without lumen management	CP	Chicago plenum ⁶
N100EMG nLight without lumen management for use with generator supply EM power ⁵		
		PWS1836 6' pre-wire 3/8" diameter, 18 gauge, 1 circuit
		PWS1846 6' pre-wire 3/8" diameter, 18 gauge, 2 circuit
		PWS1846 PWSLV Two cables: one 6' prewire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge
		PWS1856LV 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/ low voltage wires
		BAA Buy America(n) Act Compliant
		Restriction note: Not available for 1X4

Accessories: Order as separate catalog number.	
DGA24	2X4 Drywall ceiling adaptor, unit installation
DGA22	2X2 Drywall ceiling adaptor , unit installation
DGA14	1X4 Drywall ceiling adaptor , unit installation
2X4SMKSHP	PAF Multi-Use Surface Mount Kit 2X4 Post-Paint
2X2SMKSHP	PAF Multi-Use Surface Mount Kit 2X2 Post-Paint
1X4SMKSHP	PAF Multi-Use Surface Mount Kit 1X4 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

- Notes
- 1

Approximate lumen output.
- 2

Not available with Emergency Battery packs or SLD driver.
- 3

Not available with N80, N80EMG, N100, or N100EMG.
- 4

nLight access limitations with EZB.
- 5

nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.
- 6

Not available with N80, N80EMG, N100, N100EMG, PWS1836, PWS1846, PWS1846 PWSLV or PWS1856LV.

2X4 Performance Data			
Lumen Package	Lumens	Input Watts	LPW
30L LP830	3144	29.2	107
30L LP835	3238	29.2	110
30L LP840	3303	29.2	113
30L LP850	3369	29.2	115
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	55.3	109
60L LP835	6261	55.3	113
60L LP840	6387	55.3	115
60L LP850	6514	55.3	117
72L LP830	7495	69.7	107
72L LP835	7720	69.7	110
72L LP840	7874	69.7	113
72L LP850	8032	69.7	115

2X2 Performance Data			
Lumen Package	Lumens	Input Watts	LPW
20L LP830	2299	20.1	114
20L LP835	2368	20.1	117
20L LP840	2415	20.1	120
20L LP850	2464	20.1	122
33L LP830	4138	37.0	112
33L LP835	4262	37.0	115
33L LP840	4347	37.0	117
33L LP850	4478	37.0	121
40L LP830	4699	41.4	114
40L LP835	4840	41.4	117
40L LP840	4937	41.4	119
40L LP850	5036	41.4	122

1X4 Performance Data			
Lumen Package	Lumens	Input Watts	LPW
RTL4 15L LP830	1593	14.1	113
RTL4 15L LP835	1652	14.1	117
RTL4 15L LP840	1711	14.1	121
RTL4 15L LP850	1711	14.1	121
RTL4 15L LP930	1298	14.1	92
RTL4 15L LP835	1357	14.1	96
RTL4 15L LP840	1416	14.1	100
RTL4 15L LP850	1416	14.1	100
RTL4 20L LP830	2038	17.6	116
RTL4 20L LP835	2114	17.6	120
RTL4 20L LP850	2189	17.6	124
RTL4 20L LP930	2189	17.6	124
RTL4 20L LP935	1661	17.6	94
RTL4 20L LP940	1736	17.6	99
RTL4 20L LP940	1812	17.6	103
RTL4 20L LP950	1812	17.6	103
RTL4 30L LP830	3002	26.6	113
RTL4 30L LP835	3113	26.6	117
RTL4 30L LP840	3224	26.6	121
RTL4 30L LP850	3224	26.6	121
RTL4 30L LP930	2446	26.6	92
RTL4 30L LP935	2557	26.6	96
RTL4 30L LP940	2669	26.6	100
RTL4 30L LP950	2669	26.6	100

1X4 Performance Data			
Lumen Package	Lumens	Input Watts	LPW
RTL4 40L LP830	4000	35.6	112
RTL4 40L LP835	4148	35.6	116
RTL4 40L LP840	4296	35.6	121
RTL4 40L LP850	4296	35.6	121
RTL4 40L LP930	3259	35.6	92
RTL4 40L LP935	3407	35.6	96
RTL4 40L LP940	3555	35.6	100
RTL4 40L LP950	3555	35.6	100
RTL4 48L LP830	4910	42.4	116
RTL4 48L LP835	5092	42.4	120
RTL4 48L LP840	5274	42.4	124
RTL4 48L LP850	5274	42.4	124
RTL4 60L LP930	4001	42.4	94
RTL4 60L LP935	4183	42.4	99
RTL4 60L LP940	4364	42.4	103
RTL4 60L LP940	4364	42.4	103
RTL4 60L LP830	6067	54.6	111
RTL4 60L LP835	6292	54.6	115
RTL4 60L LP840	6516	54.6	119
RTL4 60L LP850	6516	54.6	119
RTL4 60L LP930	4943	54.6	91
RTL4 60L LP935	5168	54.6	95
RTL4 60L LP940	5393	54.6	99
RTL4 60L LP950	5393	54.6	99

Emergency Battery Delivered Lumens
Use the formula below to determine the delivered lumens in emergency mode
Delivered Lumens = P x LPW
P = Output power of emergency driver (10W for E10W or 7W for E7W)
LPW = Lumen per watt rating of the luminaire can be found in Performance section on this spec sheet

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 Volumetric Recessed Lighting

UGR Values of RTL 2X4 @ 80CRI and 3500K (70% 50% 20% reflectance using a 4H x 8H room size)		
Lumen Package	Crosswise	Endwise
3000LM	17.3	17.9
4000LM	18.7	19.3
4800LM	19.3	19.9
6000LM	19.6	20.2
7200LM	20.3	20.9

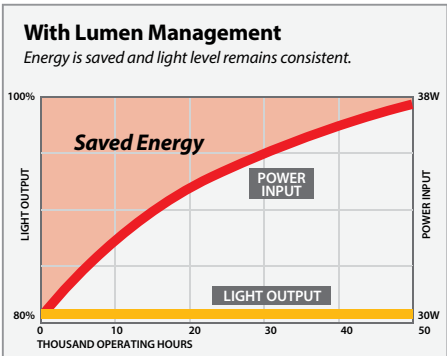
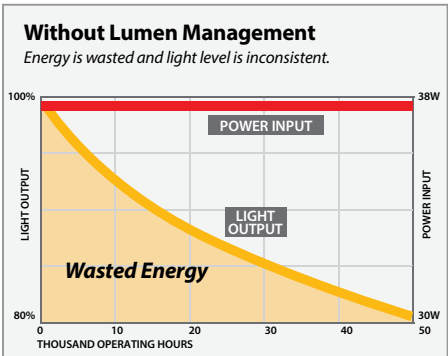
UGR Values of RTL 2X2 @ 80CRI and 3500K (70% 50% 20% reflectance using a 4H x 8H room size)		
Lumen Package	Crosswise	Endwise
2000LM	18.3	19.3
3300LM	20.4	21.3
4000LM	20.8	21.8

UGR Values of RTL 1X4 @ 80CRI and 3500K (70% 50% 20% reflectance using a 4H x 8H room size)		
Lumen Package	Crosswise	Endwise
1500LM	16.6	18.9
2000LM	17.5	19.8
3000LM	18.8	21.1
4000LM	19.8	22.1
4800LM	20.6	22.8
6000LM	21.3	23.5

UGR varies based on luminaire options and is affected by application dependent parameters. Numbers depicted here are considered “Luminaire-UGR and/or “Point-UGR” values. To determine a more precise maximum UGR value (“Application-UGR”), a full lighting design layout should be completed with the selected luminaire configuration for each application

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.



PHOTOMETRICS

Please click link to access [Photometry & Revit \(BIM\)](#)