

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 18, 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.

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.

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



Volumetric Lighting

2RTL2

2' X 2'

LED



Dimensions

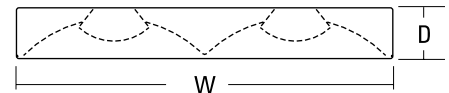
All dimensions are inches (centimeters) unless otherwise specified.

Specifications

Length: 23.75 (60.3)

Width: 23.75 (60.3)

Depth: 3-1/8 (7.9)



A+ Capable Luminaire

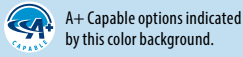
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- 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'x2'



ORDERING INFORMATION

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

Example: 2RTL2 33L EZ1 LP835 N80

Series	Air function	Lumens ¹	Voltage	Driver
2RTL2 Recessed 2X2 LED	(blank) No air CAS Center air slots (air removal)	20L 2000 lumens 33L 3300 lumens 40L 4000 lumens	(blank) MVOLT (120 - 277V) 347 347V ²	EZ1 eldoLED dims to 1% (0-10 volt dimming) EZB eldoLED dims to 0.1% (0-10 volt dimming) GZ1 Dims to 1% (0-10V dimming) ³ GZ10 Dims to 10% (0-10V dimming) ³ EDB eldoLED DALI ³ SLD Step-level dimming ³

Color temperature	Controls ⁴	Options
LP830 3000 K, 82CRI LP835 3500 K, 82CRI LP840 4000 K, 82CRI LP850 5000 K, 82CRI	(blank) No controls N80 nLight with 80% lumen management N80EMG nLight with 80% lumen management for use with generator supply EM power ⁵ N100 nLight without lumen management N100EMG nLight without lumen management for use with generator supply EM power ⁵	BDP Disconnect Plug 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 ⁶ 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

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 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.

Accessories: Order as separate catalog number.

DGA22	Drywall ceiling adaptor, unit installation
2X2SMKSH PAF	Multi-Use Surface Mount Kit 2X2 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

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

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.

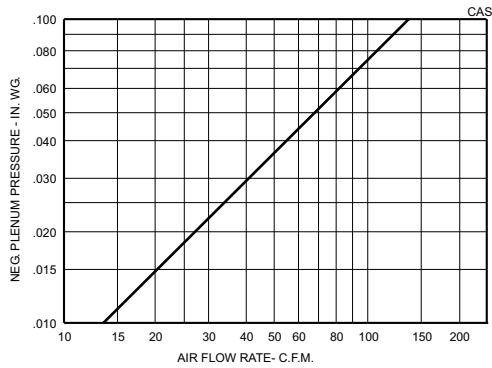
LPW = Lumen per watt rating of the luminaire. LPW information available in Performance Data section.

nLight® Control Accessories:

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

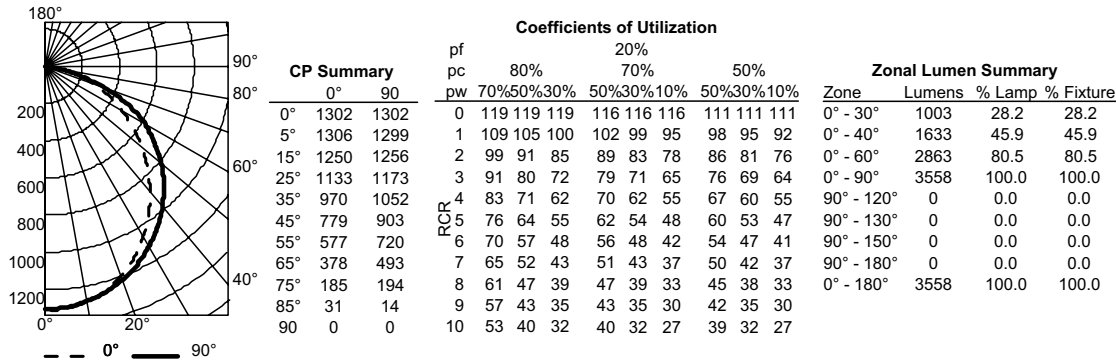
WallPod stations	Model number	Occupancy sensors	Model number
On/Off	nPODM [color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPODM DX [color]	Large motion 360°, ceiling (PIR / dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX	Wall switch with raise/lower	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

2RTL Volumetric Recessed Lighting 2'x2'

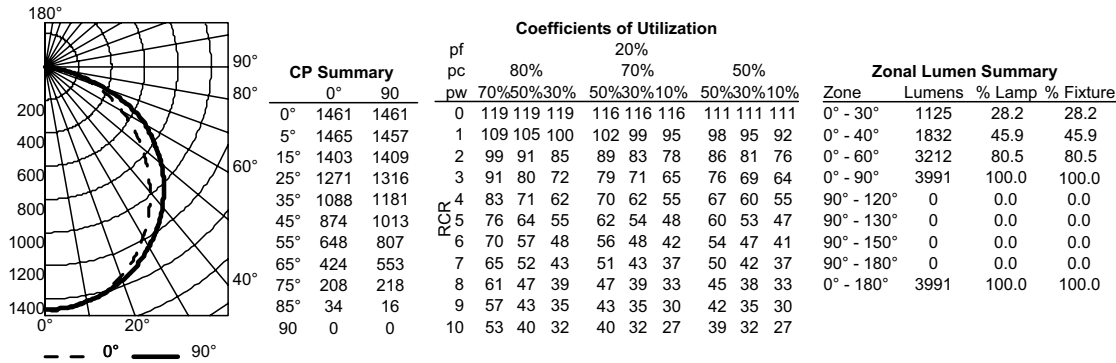


PHOTOMETRICS

2RTL2 33L LP835, 3,558 delivered lumens, test no. LTL25813P5, tested in accordance to IESNA LM-79.



2RTL2 40L LP835, 3,991 delivered lumens, test no. LTL25813P10, tested in accordance to IESNA LM-79.



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 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

2RTL Volumetric Recessed Lighting 2'x2'

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.

