LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

FEATURES & SPECIFICATIONS

INTENDED USE — The 2RTL2R Relight assembly combines digital LED lighting and controls technology capabilities with patented high-performance optical design to offer the most advanced retrofit solution available 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. The RTL2R is suitable for quick, simple retrofit into nearly any existing deep-cell parabolic or lensed troffer fluorescent fixtures *(see dimensional requirements)*.

CONSTRUCTION — The relight assembly consists of four basic component parts that easily install into the host fixture.

End brackets are heavy-gauge powder-painted steel and are attached securely to the host fixture with included hardware. These brackets provide all of the support and attachment points for the light engine and trim assemblies. End bracket flanges have black finish to match reveals of most deep-cell parabolics.

The light engine serves as the reflector system and heat-sink and is finished in high-reflectance white powder paint. To reduce time and labor for installation, all electrical components are shipped installed and prewired on the light engine for simple electrical connection via the installed driver quick disconnect. A unitized trim assembly provides reflector and refractors for volumetric performance and architectural aesthetics. Molded and recyclable PETE (polyethylene) reflector is firmly attached to the universal bracket via hinge and latch assembly. Included in this assembly are two prismatic acrylic refractors with light-diffusing finish for even illumination and LED obscuration.

A steel splice box accessory is included with the kit for use when required by non-standard retrofit wiring conditions.

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.

Regressed two-piece refractor system obscures and integrates individual LED images and uniformly washes the reflector cavity with light.

Sloped end panels 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. 90% LED lumen maintenance at 60,000 hours (L90/60,000).

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

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 2RTL2R 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.

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

RT LED RELIGHT

Volumetric Lighting

2RTL2R
2RTL2RT

2 X 2 VOLUMETRIC RELIGHT
LED

eldoLED · DLC QPL LISTED®

Specifications

Intended to be installed in most existing parabolic recessed fixtures.

LISTINGS — UL Classified to meet retrofit standards and requirements. 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.

INSTALLATION — Trim hinges from either side and latches securely with cam-action latches. LED access by hinging trim down to 90º, providing tool-less access to light engine. For tool-less access to driver, twist 1/4-turn latches and hinge light engine down. LED boards include plug-in connectors for easy replacement or servicing.

Suitable for use in host fixtures rated for static or many air-handling functions. (Consult factory for details on air-handling compatibility).

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

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.

Note: Specifications subject to change without notice.

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

Example: 2RTL2R 33L EZ1 LP835

2RTL2R

Series		Lumens [1]		Voltage		Driver		Lamp		Control	
2RTL2R	2x2 LED relight assembly, black end brackets for use in parabolic fixture	20L	2000	(blank)	MVOLT (120-277V)	EZ1	eldoLED dims to 1%	LP835	82 CRI, 3500K	(blank)	No controls
2RTL2RT	2x2 LED relight assembly, white end brackets for use in troffer fixture	33L	3300	347	(347V) CSA[2]	EZB	eldoLED dims to dark	LP840	82 CRI, 4000K	N80	N-light with 80% lumen management[4]
		40L	4000			GTH250	Bi-level (2-switch)	LP830	82 CRI, 3000K	N100	N-light no lumen management[4]
2RTL2RF	2x2 LED relight assembly, flange brackets for drywall installation					EXA1	Dims to 1%, Xpoint wireless enabled [3]	LP850	82 CRI, 5000K	N80EMG	N-light with 80% lumen management for use with generator supply EM power[4,5]
						EXAB	Dims to dark, Xpoint wireless enabled [3]			N100EMG	N-light without lumen management for use with generator supply EM power[4,5]

Notes
1. Approximate lumen output.
2. Option ships separately as a field-installed accessory. Not available with GTH250 driver option. Verify compliance with local codes prior to ordering.
3. Gateway not included. Requires on-site commissioning. Visit www.lightingcontrols.com/XPointWireless for more information.
4. Option only available with EZ1 or EZB Driver.
5. nLight EMG option requires a connection to existing nLight network Power is provided from a separate N80 or N100 enabled fixture.
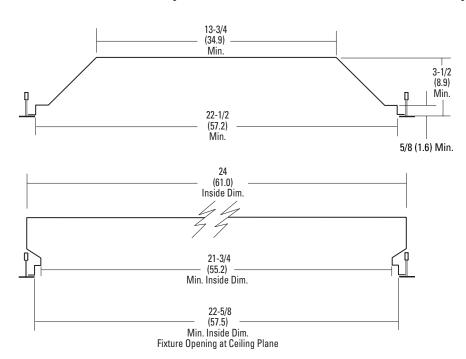
Energy Comparison - LED vs. T12 & T8				
System	Lamp type	Ballast factor	Input watts	Watts saved by using LED
LED - 3300L	LED	1.0	36	---
3-lamp T12 F40	F40T12U	0.88	108	72
3-lamp T8 F32	F32T8U	0.88	90	54
3-lamp T12 F20	F20T12	0.88	84	48
3-lamp T8 F17	F17T8	0.88	47	11
2-lamp T12	F40T12U	0.88	72	36
2-lamp T8	F32T8U	0.88	60	24

FIT COMPATIBILITY

The 2RTL2R Relight assembly was engineered to upgrade recessed 2X2 fixtures, including most parabolic and lensed troffers from all major manufacturers.
Dimensional requirements are below but Lithonia Lighting recommends a trial installation prior to purchasing project quantities. Relight assemblies are designed
to fit most recessed fixtures mounted in T-grid installations. For surface mounted fixtures or for fixtures mounted in ceiling types other than T-grids, consult factory before ordering.
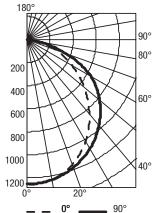

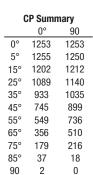| Performance Data			
Lumen package	Lumens	Input watts	LPW
20L LP830	1956	20.14	97
20L LP835	2054	20.14	102
20L LP840	2152	20.14	107
20L LP850	2280	20.14	113
33L LP830	3306	35.63	93
33L LP835	3462	35.63	97
33L LP840	3638	35.63	102
33L LP850	3912	35.63	110
40L LP830	3687	40.01	92
40L LP835	3870	40.01	97
40L LP840	4063	40.01	101
40L LP850	4284	40.17	107

Actual wattage may differ by +/- 5% when
operating between 120-277V +/- 10%

Dimensions are inches (centimeters) unless otherwise noted.

PHOTOMETRICS

2RTL2R 33L LP835, test no. LTL26006P5, tested in accordance to IESNA LM-79.

CP Summary

	0°	90
0°	1253	1253
5°	1255	1250
15°	1202	1212
25°	1089	1140
35°	933	1035
45°	745	899
55°	549	736
65°	356	510
75°	179	216
85°	37	18
90	2	0

Coefficients of Utilization

pf					20%				
pc		80%			70%			50%	
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	47	60	53	47
6	70	57	48	56	48	41	54	47	41
7	65	52	43	51	43	37	49	42	36
8	61	47	39	46	38	33	45	38	32
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°	966	27.9	27.9
0° - 40°	1575	45.5	45.5
0° - 60°	2768	80.0	80.0
0° - 90°	3463	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	3463	100.0	100.0

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