LITHONIA LIGHTING®

Catalog Number
Notes
Type

2ESL2R

2' x 2' Relight LED

eldoLED

DLC LISTED

A+ CAPABLE

ATRIUS™ READY

FEATURES & SPECIFICATIONS

INTENDED USE — The 2ESL2R LED Relight assembly is the ideal solution for renovating existing fluorescent troffer and parabolic systems, delivering improved quality of light and refreshing the space. 2ESL2R lighting eliminates the "cave effect" by delivering the ideal amount of light to walls, work surfaces, and people. The 2ESL2R Relight assembly is recommended for offices, schools, hospitals, and other general lighting applications where existing 2x2 troffer and parabolic fluorescent fixtures are currently in use.

CONSTRUCTION — Universal end brackets are constructed of 20-gauge powder-painted steel and are secured to the host fixture with provided tek screws. Prior to fabrication, reflector is coated with a proprietary paint blend and die formed for dimensional consistency. And is wired to the supply voltage using a driver-disconnect plug system provided as standard. A steel wiring connection cover is provided for use if required.

OPTICS — LED light panel and diffuser assemblies are designed to provide consistent, uniform lighting in conjunction with existing louvered doorframe. Panels are designed to use existing mounting brackets to optimize source-to-aperture distance.

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. 80% LED lumen maintenance at 60,000 hours (L80/60,000).

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 2ESL2R 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.

Enabled with Atrius™ — Select models of this product line are enabled with Atrius, making them part of the Atrius Sensory Network and ready to deliver valuable data and connectivity to the Atrius Platform. For more information concerning Atrius solutions, please refer to www.acuitybrands.com/Atrius.

INSTALLATION — After existing fluorescent components are removed from housing, universal end brackets are fastened in place with tek screws. The LED light engine assembly mounts to the end brackets and hangs securely while the wiring connection is made using a driver-disconnect plug system provided as standard. The light engine then swings up into position and is secured in place with a captive screw at each end. The door frame is then inserted via a sliding hinge into the end bracket and secured in the closed position with a rotating cam latch. Light engine may be removed from fixture during service. LED boards include plug-in connectors for easy replacement or servicing. Suitable for damp location installations.

LISTINGS — UL listed. 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.

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.

Specifications

Designed to convert most existing recessed parabolic and lensed troffers.

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

2ESL2R 2'x2'

A+ Capable options indicated by this color background.

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

Example: 2ESL2R 20L MVOLT EZ1 LP830

2ESL2R							
Series	**Lumens**[1]	**Voltage**	**Driver**	**Color temperature**	**Controls**	**Enabled with Atrius**	**Options**
2ESL2R	20L 2000 33L 3300 40L 4000	**MVOLT** 120-277V 347 347V[2]	EOHN On/Off (non-dim) EZ1 eldoLED, dims to 1% SLD Step level dimming	LP835 82 CRI, 3500 K LP840 82 CRI, 4000 K LP830 82 CRI, 3000 K LP850 82 CRI, 5000 K	(blank) No controls N80 N-light with 80% lumen management[3] N100 N-light with no lumen management[3] N80EMG N-light with 80% lumen management for use wuth generator supply EM power[3] N100EMG N-light without lumen management for use with generator supply EM power[3]	AE1CD Atrius Enabled Platform 1; VLC & BLE Positioning; Digital Driver Communication AE2CD Atrius Enabled Platform 2; VLC & BLE Positioning; Digital Driver Communication	RRLA RELOC®-ready luminaire CP Chicago plenum[4,5] PWS1836 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit PWS1846 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuit[6] PWS1846 PWSLV Two cables: one 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge[6] PWS1856LV 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/low voltage wires[6]

Enabled with Atrius™ Notes

A Only available with EZ1 or EOHN driver (consult factory).

B No Occupancy control available.

C Lower lumen packages will lose VLC functionality when dimmed.

Notes

1 Approximate lumen output.
2 Option ships separately as a field-installed accessory. Verify compliance with local codes prior to ordering.
3 No external access to nIO.
4 CP host housing required.
5 Not available with N80, N80EMG, N100, or N100EMG, Not available with PWS1836, PWS1846, PWS1856LV or PWS1846 PWSLV
6 Not available with nLIGHT

COMMERCIAL INDOOR: One Lithonia Way Conyers, GA 30012 Phone: 1-800-705-SERV (7378) www.lithonia.com

2ESL2R 2'x2'

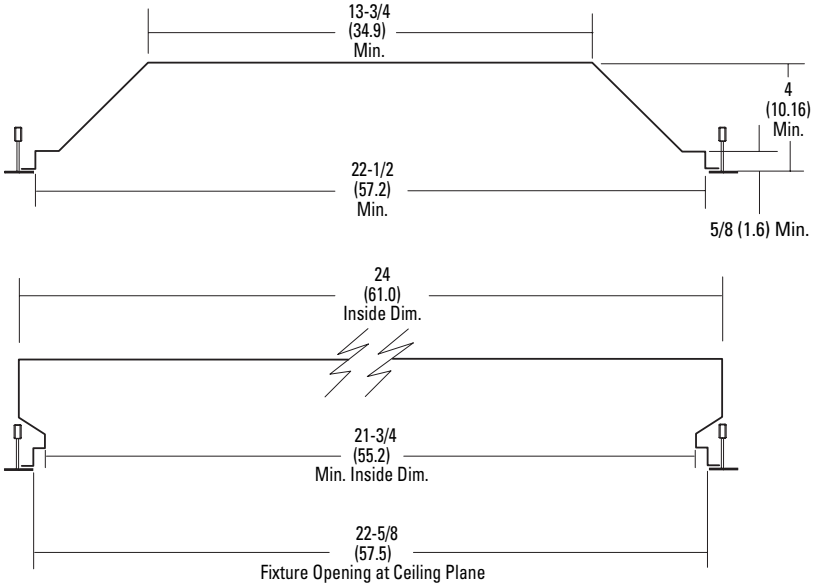
Performance Data			
Lumen Package	**Lumens**	**Input Watts[1]**	**LPW**
20L EZ1 LP830	2287	19	120
20L EZ1 LP835	2333	19	123
20L EZ1 LP840	2397	19	126
20L EZ1 LP850	2417	19	127
33L EZ1 LP830	3271	28	116
33L EZ1 LP835	3338	28	118
33L EZ1 LP840	3429	28	121
33L EZ1 LP850	3458	28	122
40L EZ1 LP830	4073	36	112
40L EZ1 LP835	4156	36	114
40L EZ1 LP840	4269	36	117
40L EZ1 LP850	4305	36	118
30L SLD LP830	2880	26	112
30L SLD LP835	2939	26	114
30L SLD LP840	3019	26	117
30L SLD LP850	3045	26	118

Energy Comparison - 2x2 LED vs. T12 & T8				
System	Lamp type	Ballast factor	Input watts[1]	Watts saved by using LED
2ESL2R 20L	LED	1.0	19	--
3-lamp T12 F40	F40T12U	0.88	108	89
3-lamp T8 F32	F32T8U	0.88	90	71
3-lamp T12 F20	F20T12	0.88	84	65
3-lamp T8 F17	F17T8	0.88	47	28
2-lamp T12	F40T12U	0.88	72	53
2-lamp T8	F32T8U	0.88	60	41

FIT COMPATIBILITY

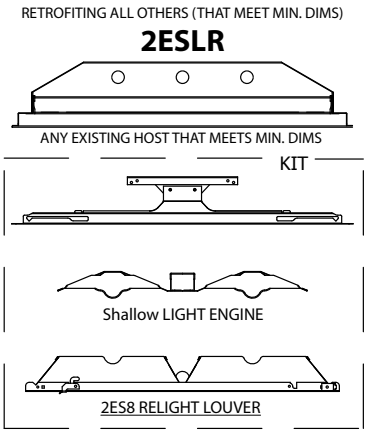
The 2ESL2R Relight assembly was engineered to upgrade recessed 2X2 fixtures, including most parabolic and lensed troffers from all major manufacturers.

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.

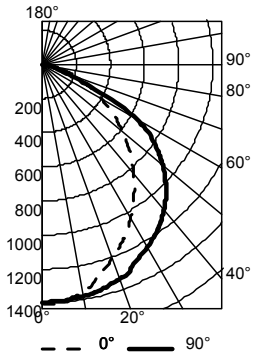
Dimensions are inches (centimeters) unless otherwise noted.



2ESL2R 2'x2'

PHOTOMETRICS

2ESL2R 33L EZ1 LP835, 3338 delivered lumens, test no. 109634P10, tested in accordance to IESNA LM-79



CP Summary

	0°	90
0°	1400	1400
5°	1394	1391
15°	1276	1365
25°	1128	1281
35°	938	1182
45°	726	1026
55°	508	804
65°	303	350
75°	136	87
85°	42	26
90	1	3

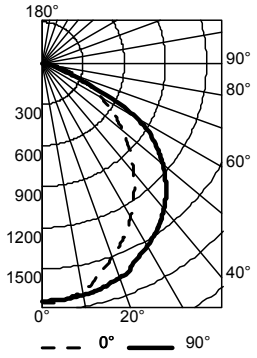
Coefficients of Utilization

	pf	20%								
	pc	80%			70%			50%		
RCR	pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
	0	119	119	119	116	116	116	111	111	111
	1	110	106	102	103	100	97	99	96	94
	2	101	93	87	91	86	81	88	83	79
	3	92	83	75	81	74	68	78	72	67
	4	85	74	66	72	65	59	70	63	58
	5	78	66	58	65	57	51	63	56	51
	6	73	60	51	59	51	45	57	50	45
	7	67	54	46	54	46	40	52	45	40
	8	63	50	42	49	41	36	48	41	36
	9	59	46	38	45	38	32	44	37	32
	10	55	42	35	42	34	29	41	34	29

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1046	31.3	31.3
0° - 40°	1689	50.6	50.6
0° - 60°	2870	86.0	86.0
0° - 90°	3338	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	3338	100.0	100.0

2ESL2R 40L EZ1 LP835, 4156 delivered lumens, test no. 109634P14, tested in accordance to IESNA LM-79



CP Summary

	0°	90
0°	1743	1743
5°	1735	1732
15°	1588	1699
25°	1404	1594
35°	1168	1472
45°	904	1277
55°	632	1001
65°	377	436
75°	169	109
85°	52	33
90	2	3

Coefficients of Utilization

	pf	20%								
	pc	80%			70%			50%		
RCR	pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
	0	119	119	119	116	116	116	111	111	111
	1	110	106	102	103	100	97	99	96	94
	2	101	93	87	91	86	81	88	83	79
	3	92	83	75	81	74	68	78	72	67
	4	85	74	66	72	65	59	70	63	58
	5	78	66	58	65	57	51	63	56	51
	6	73	60	51	59	51	45	57	50	45
	7	67	54	46	54	46	40	52	45	40
	8	63	50	42	49	41	36	48	41	36
	9	59	46	38	45	38	32	44	37	32
	10	55	42	35	42	34	29	41	34	29

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1302	31.3	31.3
0° - 40°	2102	50.6	50.6
0° - 60°	3573	86.0	86.0
0° - 90°	4156	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	4156	100.0	100.0