

FEATURES & SPECIFICATIONS

INTENDED USE — The 2ESL4RR LED Relight assembly is designed to convert Lithonia 2ES8R Relight kits to highly efficient LED performance in a variety of applications and mounting heights.

CONSTRUCTION — LED panels with integral diffuser assembly install in place of existing fluorescent reflectors, using 2ES8R end brackets for support and positioning.

Intelligent programmable driver installs in place of fluorescent ballast, and electrical components plug together for quick and simple installation.

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 2ESL4RR 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 doorframe 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.

Catalog Number
Notes
Type



2ESL4RR

2' x 4' Relight LED



eldoLED



ATRIUS™
READY

Specifications

Intended for installation in host fixtures where 2ES8R fluorescent Relight kits have been installed

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

2ESL4RR 2' x 4'



A+ Capable options indicated by this color background.

ORDERING INFORMATION

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

Example: 2ESL4RR 40L MVOLT EZ1 LP840

Series	Lumens ¹	Voltage	Driver	Color temperature	Controls
2ESL4RR	30L 3000 34L 3400 40L 4000 44L 4400 48L 4800 60L 6000 72L 7200	MVOLT 120-277V 347 347V ²	E0HN 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 with generator supply EM power ³ N100EMG N-light without lumen management for use with generator supply EM power ³

Enabled with Atrius	Options
AE1CD Atrius Enabled Platform 1; VLC & BLE Positioning; Digital Driver Communication	EL7L 700 lumen battery pack ^{4,6} EL14L 1400 lumen battery pack ^{4,6}
AE2CD Atrius Enabled Platform 2; VLC & BLE Positioning; Digital Driver Communication	RRLA RELOC [®] -ready luminaire CP Chicago plenum ^{5,8} 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' pre-wire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge ⁷ PWS1856LV 6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/low voltage wires ⁷

Enabled with Atrius™ Notes

- A Not available with 72L or higher.
- B Only available with EZ1 or E0HN driver (consult factory).
- C No Occupancy Control available.
- D 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 Not available with 72L lumen package.
- 5 CP host housing required.
- 6 When using pre-wire option, use PWS1846 or PWS1846 PWSLV. For more information on the EL14LSD, please see the PSSD2 specification sheet.
- 7 Not available with nLIGHT wired network or individual control.
- 8 Not available with N80, N80EMG, N100, or N100EMG. Not available with PWS1836, PWS1846, PWS1856LV or PWS1846.

2ESL4RR 2' x 4'

Performance Data			
Lumen Package	Lumens	Input Watts ¹	LPW
30L EZ1 LP830	3183	24	132
30L EZ1 LP835	3248	24	134
30L EZ1 LP840	3336	24	138
30L EZ1 LP850	3364	24	139
40L EZ1 LP830	3979	30	131
40L EZ1 LP835	4060	30	134
40L EZ1 LP840	4170	30	138
40L EZ1 LP850	4206	30	139
44L EZ1 LP830	4391	34	131
44L EZ1 LP835	4480	34	133
44L EZ1 LP840	4602	34	137
44L EZ1 LP850	4641	34	138
48L EZ1 LP830	4762	37	127
48L EZ1 LP835	4859	37	130
48L EZ1 LP840	4991	37	133
48L EZ1 LP850	5033	37	135
60L EZ1 LP830	6059	50	122
60L EZ1 LP835	6182	50	125
60L EZ1 LP840	6350	50	128
60L EZ1 LP850	6404	50	129
72L EZ1 LP830	7126	61	116
72L EZ1 LP835	7271	61	119
72L EZ1 LP840	7468	61	122
72L EZ1 LP850	7532	61	123
80L SLD LP830	7744	72	108
80L SLD LP835	7902	72	110
80L SLD LP840	8116	72	113
80L SLD LP850	8186	72	114

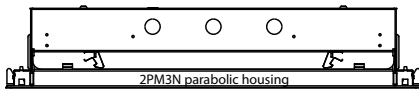
Energy Comparison - 2x4 LED vs. T12 & T8				
System	Lamp type	Ballast factor	Input watts ¹	Watts saved by using LED
2ESL4RR 40L	LED	1.0	30	--
4-lamp T12	F40T12	0.88	144	114
4-lamp T8	F32T12	0.88	110	80
3-lamp T12	F40T12	0.88	108	78
3-lamp T8	F32T12	0.88	90	60
2-lamp T12	F40T12	0.88	72	42
2-lamp T8	F32T12	0.88	60	30

FIT COMPATIBILITY

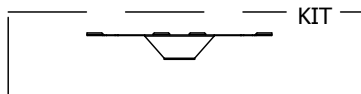
The 2ESL4RR Relight assembly was engineered to upgrade recessed existing 2ES8R fixtures. Lithonia Lighting recommends a trial installation prior to purchasing project quantities.

RETROFITTING AN EXISTING 2ES8R

2ESLRR

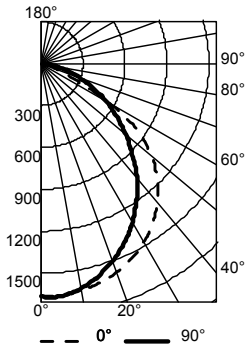


EXISTING 2ES8R HOST



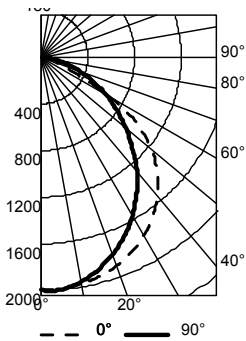
PHOTOMETRICS

2ESL4RR 40L EZ1 LP835, 4060 delivered lumens, test no. 109635P2, tested in accordance to IESNA LM-79



CP Summary			Coefficients of Utilization												Zonal Lumen Summary								
	0°	90°	pf	80%						70%						50%				Zone	Lumens	% Lamp	% Fixture
			pc	70%	50%	30%	50%	30%	10%	50%	30%	10%	50%	30%	10%								
	0°	1667	1667	0	119	119	119	116	116	116	111	111	111	111	111	0° - 30°	1268	31.2	31.2				
	5°	1663	1669	1	110	106	102	103	100	97	99	96	94			0° - 40°	2054	50.6	50.6				
	15°	1623	1577	2	101	93	87	91	86	81	88	83	79			0° - 60°	3490	85.9	85.9				
	25°	1538	1413	3	92	83	75	81	74	68	78	72	67			0° - 90°	4060	100.0	100.0				
	35°	1392	1192	4	85	74	65	72	65	59	70	63	58			90° - 180°	0	0.0	0.0				
	45°	1174	921	5	78	66	58	65	57	51	63	56	51			0° - 180°	4060	100.0	100.0				
	55°	854	663	6	73	60	51	59	51	45	57	50	45										
	65°	251	408	7	67	54	46	54	46	40	52	45	40										
	75°	82	189	8	63	50	41	49	41	36	48	41	35										
	85°	14	60	9	59	46	38	45	37	32	44	37	32										
	90°	0	12	10	55	42	34	42	34	29	41	34	29										

2ESL4RR 48L EZ1 LP835, 4859 delivered lumens, test no. 109635P10, tested in accordance to IESNA LM-79



CP Summary			Coefficients of Utilization												Zonal Lumen Summary								
	0°	90°	pf	80%						70%						50%				Zone	Lumens	% Lamp	% Fixture
			pc	70%	50%	30%	50%	30%	10%	50%	30%	10%	50%	30%	10%								
	0°	1995	1995	0	119	119	119	116	116	116	111	111	111	111	111	0° - 30°	1518	31.2	31.2				
	5°	1990	1997	1	110	106	102	103	100	97	99	96	94			0° - 40°	2458	50.6	50.6				
	15°	1942	1888	2	101	93	87	91	86	81	88	83	79			0° - 60°	4176	85.9	85.9				
	25°	1841	1691	3	92	83	75	81	74	68	78	72	67			0° - 90°	4859	100.0	100.0				
	35°	1666	1426	4	85	74	65	72	65	59	70	63	58			90° - 180°	0	0.0	0.0				
	45°	1405	1102	5	78	66	58	65	57	51	63	56	51			0° - 180°	4859	100.0	100.0				
	55°	1022	793	6	73	60	51	59	51	45	57	50	45										
	65°	300	489	7	67	54	46	54	46	40	52	45	40										
	75°	98	227	8	63	50	41	49	41	36	48	41	35										
	85°	17	72	9	59	46	38	45	37	32	44	37	32										
	90°	0	14	10	55	42	34	42	34	29	41	34	29										