

Project:	Catalog #:	Type:
Prepared by:	Notes:	Date:

ELYRTD3SR

LED Retrofit Troffer Kit | 2x2 & 2x4
100,000 Hour System Lifetime
10-yr Warranty



OVERVIEW

Energetic Lighting's ELYRTD3SR LED retrofit troffer kit is a low cost, time-saving alternative to complete fixture replacement for customers looking to upgrade their existing fluorescent luminaires with today's innovative and energy saving LED solutions. Access above the drop ceiling plenum is not required during installation which saves time and allows for a cleaner installation by not disturbing dust and insulation above the ceiling. Our retrofit kit can be installed by a single person in under 5 minutes vs. a typical 20 minute complete fixture replacement. Aesthetics and illumination are improved with the center basket design's use of a diffused lens to help deliver soft and uniform ambient lighting. We utilize the latest performance LEDs with premium OSRAM drivers rated for 100,000 hours of use, backed by a 10-year warranty.

Our ELYRTD3SR LED retrofit troffer kit provides the perfect blend of design, performance and reliability at a superior value that is ideal when upgrading the lighting in commercial office & retail spaces, schools & universities, hospitals and more.

KEY FEATURES

- Designed to retrofit most existing 2x2 or 2x4 troffers
- Utilizes existing housing to save time & eliminate waste
- Plenum access not required for retrofit installation (complete installation done from room-side access)
- Modern center basket design aesthetic
- High efficiency acrylic diffusing lens for no pixelation
- Utilizes 0-10V, 100,000 hour OSRAM drivers standard
- 87% lumen maintenance @ 54,000 hours - L87/54,000 (per IES TM21)
- Projected L70 @ 133,000 hours (per IES TM21)
- Available in 4000K @ 82 CRI
- 3210 lms (2x2) @ 131 LPW, 3283 lms @ 134 LPW (2x4)
- All configurations are DLC Premium qualified
- Optional integrated emergency battery pack
- 10-year warranty standard*

SPECIFICATIONS & FEATURES

Construction

Retrofit kit door frame and reflector assemblies are made from die-formed cold rolled steel. All painted components are high reflectance white powder coat for improved optical performance and visual aesthetic. Contractor friendly design allows for complete installation from room-side access. Plenum access not required for installation. LED boards and drivers are easily accessed from below. Minimum 3.0" depth required for proper installation and clearance.

Optics

Uniform horizontal and vertical illumination is achieved by the coupling of the LED platform with a performance reflector system and high efficiency curved extruded acrylic diffusing lens. The optical system creates a soft and uniform visual appearance with no LED pixelation for superior visual comfort.

Electrical

Efficient long life LED platform is coupled with 100,000 hour OSRAM drivers to help deliver optimal performance and quality illumination for the extended life of the luminaire. Provides 87% LED lumen maintenance at 54,000 hours (L87/54,000) per IES TM21. Projected L70 @ 133,000 hours. Drivers are available for 120-277V applications and are 0-10V dimming compatible standard.

Emergency Battery Pack Option

Optional integral emergency battery pack is available in 8-watts for 120-277V use to meet required life-safety requirements (25° C max ambient). The battery system provides 90-minutes of continuous power to the LED system for code compliance. Test switch and indicator light is located on the front reflector. Multiply the lumens per watt of the specified SKU by 8-watts of the battery pack for the approximate delivered lumens. (Ex. 131 LPW x 8-watts = 1048 lumens)

Compliance & Certification

All luminaires are built to UL1598 standards with appropriate UL/cUL labels. Suitable for damp location use. Emergency fixtures are labeled UL924 and are dry location only. Maintains insulation contact (IC) rating of existing fixture. Adheres to LM79, LM80 and TM21 industry standards for performance and lifetime calculations. DesignLights Consortium® (DLC) qualified product. Refer to DLC website at www.designlights.org/QPL to confirm which specific product configurations are qualified.

Warranty

The ELYRTD3SR series of luminaires have a 10-year standard warranty. *Emergency battery components are subject to our 5-year standard warranty. (Terms & Conditions apply).

Installation & Fitment Compatibility

The ELYRTD3SR retrofit kit series was designed and engineered to upgrade parabolic recessed 2x2 and 2x4 troffers from most major lighting manufacturers. See dimensional information below (it is recommended that a trial sample is test installed prior to purchasing project quantities).

After original existing fluorescent components are removed from the original luminaire, the universal retrofit brackets are installed and secured using the supplied screws. The retrofit assembly can be hung to the universal brackets for easy wiring and final installation steps. Always follow the installation instructions for added detail and safety information.

Load Information

Power Factor	0.90
THD	10%
Low Temp	-20° C
Max Temp	50° C
Unit Weight ¹	8.5 lbs (2x2), 13.5 lbs

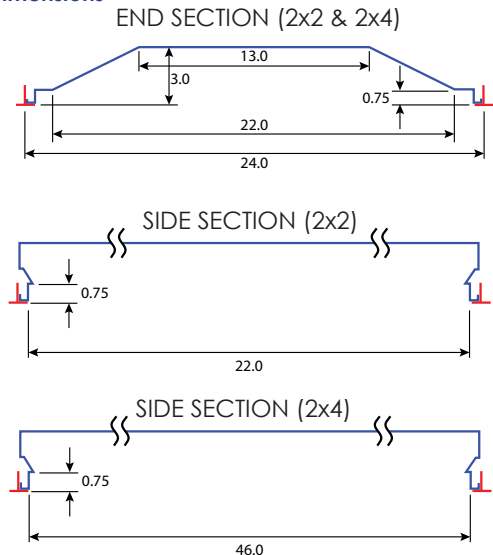
1. Add 1.0 lbs for emergency battery option.

Shipping Information

Size	Weight ¹	Pallet (54"l x 40"w x 79"h)
2x2	11 lbs	68 per
2x4	18 lbs	34 per

1. Add 1.0 lbs for emergency battery option.

Fitment Dimensions



STOCK ORDERING INFORMATION (non-emergency options)

Catalog Logic	Order #	Size	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
ELYRTD3SR-2X2CD	60054	2' x 2'	3210	25	131	4000K	82	120-277	0-10V ¹	Premium	68
ELYRTD3SR-2X4CD	60055	2' x 4'	3283	25	134	4000K	82	120-277	0-10V ¹	Premium	34

Notes:
1. 0-10V dimming driver standard, leads are capped from the factory, dims to 10%.

STOCK ORDERING INFORMATION (emergency battery pack options)

Catalog Logic	Order #	Size	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
ELYRTD3SRE-2X2CD ^{1,2}	60056	2' x 2'	3210	25	131	4000K	82	120-277	0-10V ³	Premium	68
ELYRTD3SRE-2X4CD ^{1,2}	60057	2' x 4'	3283	25	134	4000K	82	120-277	0-10V ³	Premium	34

Notes:
1. The emergency battery system provides approximately 8-watts of continuous power to the LED system for code compliance (25°C max ambient).
2. Approximate delivered lumens in emergency mode: 8-watts x 131 LPW = 1048 lumens (2x2), 8-watts x 134 LPW = 1072 lumens (2x4).
3. 0-10V dimming driver standard, leads are capped from the factory, dims to 10%.

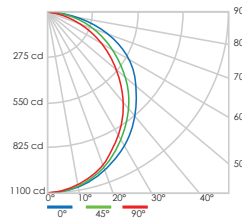
PHOTOMETRIC DATA

Luminaire Data

Cat Logic: ELYRTD3SR-2X2CD
Test Report: ELYRTD3SR-2X2CD.IES
CCT: 4000
Lamp Type: LED
Lumens: 3210
Input Watts: 25
Efficacy: 131
Spacing: 0° = 1.30 90° = 1.20

Photometric values based on tests performed in compliance with LM-79.

Indoor Candela Plot



Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	848	26.4
0-40	1385	43.1
0-60	2456	76.5
0-90	3210	100.0
0-180	3210	100.0

Candlepower

Angle	0°	90°
0	1100	1100
5	1096	1090
10	1083	1070
15	1062	1039
20	1037	996
25	998	940
30	955	876
35	903	809
40	850	733
45	789	654
50	726	571
55	665	487
60	597	402
65	525	316
70	437	233
75	329	151
80	206	79
85	67	24
90	0	0

Coefficients of Utilization

Effective Floor Cavity Reflectance 20%

rc	Effective Floor Cavity Reflectance 20%																															
	80%				70%				50%				30%				10%				0%											
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																																
0	119	119	119	119	116	116	116	116	111	111	111	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100	100	100	100	100	
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	85	87	85	83	83	83	83	83	83	83	83	83	83	83	83
2	98	90	82	77	95	88	81	76	84	79	74	81	76	72	78	74	70	68	74	70	68	68	68	68	68	68	68	68	68	68	68	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57	64	59	57	57	57	57	57	57	57	57	57	57	57	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	49	55	51	49	49	49	49	49	49	49	49	49	49	49	49
5	75	62	53	46	73	61	52	46	58	51	45	56	50	45	55	49	44	42	49	44	42	42	42	42	42	42	42	42	42	42	42	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37	43	39	37	37	37	37	37	37	37	37	37	37	37	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32	39	34	32	32	32	32	32	32	32	32	32	32	32	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29	35	31	29	29	29	29	29	29	29	29	29	29	29	29
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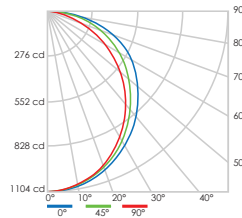
PHOTOMETRIC DATA

Luminaire Data

Cat Logic: ELYRTD3SR-2X4CD
Test Report: ELYRTD3SR-2X4CD.IES
CCT: 4000
Lamp Type: LED
Lumens: 3283
Input Watts: 25
Efficacy: 134
Spacing: 0° = 1.30 90° = 1.22

Photometric values based on tests performed in compliance with LM-79.

Indoor Candela Plot



Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	852	26.0
0-40	1393	42.4
0-60	2483	75.7
0-90	3283	100.0
0-180	3283	100.0

Candlepower

Angle	0°	90°
0	1104	1104
5	1098	1096
10	1088	1078
15	1066	1047
20	1036	1005
25	998	954
30	952	895
35	901	829
40	846	756
45	787	678
50	728	598
55	666	514
60	603	428
65	530	341
70	447	253
75	348	166
80	236	89
85	103	28
90	1	0

Coefficients of Utilization

Effective Floor Cavity Reflectance 20%

rc	Effective Floor Cavity Reflectance 20%																															
	80%				70%				50%				30%				10%				0%											
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																																
0	119	119	119	119	116	116	116	116	111	111	111	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100	100	100	100	100	
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82	89	87	84	82	82	82	82	82	82	82	82	82	82	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68	74	70	68	68	68	68	68	68	68	68	68	68	68	68
3	89	78	69	63	86	76	68	62	73	67	61	70	65	60	68	63	59	57	64	59	57	57	57	57	57	57	57	57	57	57	57	57
4	81	69	60	53	79	67	59	52	65	58	52	63	56	51	60	55	50	48	55	51	49	49	49	49	49	49	49	49	49	49	49	49
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