energetic®
Smarter lighting

ELYRTD3
LED Retrofit Troffer Kit | 2x2 & 2x4
50,000 Hour System Lifetime
5-yr Warranty

DLC PREMIUM LISTED · **c UL us** · **RoHS COMPLIANT** · **5 YEAR WARRANTY**

OVERVIEW

Energetic Lighting's ELYRTD3 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 drivers rated for 50,000 hours of use, backed by a 5-year warranty.

Our ELYRTD3 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, 50,000 hour rated 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
- 3240 lms (2x2) @ 128 LPW, 3335 lms @ 131 LPW (2x4)
- All configurations are DLC Premium qualified
- Optional integrated emergency battery pack

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 50,000 hour rated drivers to help deliver optimal performance and quality illumination for the extended life of the luminaire. 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. 130 LPW x 8-watts = 1040 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 ELYRTD3 series of luminaires have a 5-year standard warranty. (Terms & Conditions apply).

Installation & Fitment Compatibility

The ELYRTD3 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

END SECTION (2x2 & 2x4)
13.0 · 3.0 · 0.75 · 22.0 · 24.0

SIDE SECTION (2x2)
0.75 · 22.0

SIDE SECTION (2x4)
0.75 · 46.0

Specifications subject to change without notice.
All values are nominal or typical values, measured under laboratory conditions @ 25° C.
Actual performance may vary slightly as a result of end-user environment/application.

energetic®
Smarter lighting
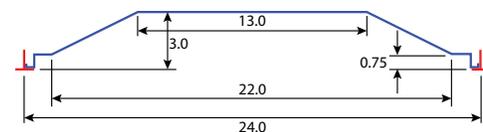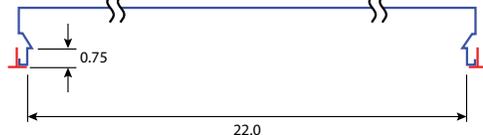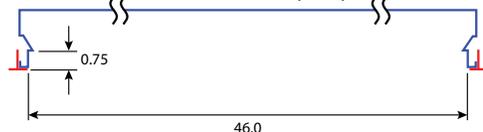
STOCK ORDERING INFORMATION (non-emergency options)

Catalog Logic	Order #	Size	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
ELYRTD3-2X2CD	60022	2' x 2'	3240	25	128	4000K	82	120-277	0-10V[1]	Premium	68
ELYRTD3-2X4CD	60024	2' x 4'	3335	25	131	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
ELYRTD3E-2X2CD[1,2]	60023	2' x 2'	3240	25	128	4000K	82	120-277	0-10V[3]	Premium	68
ELYRTD3E-2X4CD[1,2]	60025	2' x 4'	3335	25	131	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 128 LPW = 1024 lumens (2x2), 8-watts x 131 LPW = 1048 lumens (2x4).
3. 0-10V dimming driver standard, leads are capped from the factory, dims to 10%.

PHOTOMETRIC DATA

Luminaire Data

Cat Logic: ELYRTD3-2X2CD
Test Report: ELYRTD3-2X2CD.IES
CCT: 4000
Lamp Type: LED
Lumens: 3240
Input Watts: 25
Efficacy: 128
Spacing: 0° = 1.22 90° = 1.30

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

Indoor Candela Plot

273 cd, 547 cd, 820 cd, 1094 cd — 0° 10° 20° 30° 40° / 50° 60° 70° 80° 90°
0° (blue), 45° (green), 90° (red)
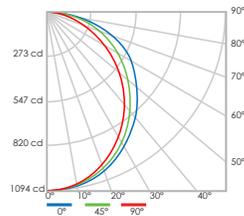
Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	847	26.1
0-40	1384	42.7
0-60	2464	76.0
0-90	3240	100.0
0-180	3240	100.0

Candlepower

Angle	0°	90°
0	1094	1094
5	1087	1089
10	1068	1076
15	1037	1059
20	995	1030
25	942	993
30	882	950
35	814	900
40	740	844
45	662	784
50	582	725
55	498	665
60	414	603
65	328	529
70	245	442
75	165	339
80	93	217
85	34	76
90	1	3

Coefficients of Utilization

Effective Floor Cavity Reflectance 20%

| rc	80%				70%				50%			30%			10%			0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	70	63	86	76	69	62	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	60	55	50	48
5	75	62	52	46	73	60	52	45	58	51	45	56	49	44	54	48	44	41
6	69	55	46	40	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

PHOTOMETRIC DATA

Luminaire Data

Cat Logic: ELYRTD3-2X4CD
Test Report: ELYRTD3-2X4CD.IES
CCT: 4000
Lamp Type: LED
Lumens: 3335
Input Watts: 25
Efficacy: 131
Spacing: 0° = 1.24 90° = 1.30

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

Indoor Candela Plot

274 cd, 548 cd, 822 cd, 1096 cd — 0° 10° 20° 30° 40° / 50° 60° 70° 80° 90°
0° (blue), 45° (green), 90° (red)
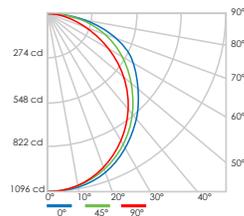
Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	851	25.5
0-40	1396	41.9
0-60	2502	75.0
0-90	3335	100.0
0-180	3335	100.0

Candlepower

Angle	0°	90°
0	1096	1096
5	1090	1093
10	1073	1080
15	1044	1063
20	1007	1036
25	958	998
30	901	956
35	836	906
40	766	851
45	690	793
50	611	732
55	529	671
60	444	608
65	357	538
70	269	456
75	184	357
80	105	242
85	39	106
90	2	4

Coefficients of Utilization

Effective Floor Cavity Reflectance 20%

rc	80%				70%				50%			30%			10%			0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	69	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	79	67	59	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	45	58	50	44	56	49	43	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	64	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	37	31	57	45	36	30	43	36	30	42	35	30	41	34	30	28
9	55	42	33	27	54	41	33	27	40	32	27	39	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

Specifications subject to change without notice.
All values are nominal or typical values, measured under laboratory conditions @ 25°C.
Actual performance may vary slightly as a result of end-user environment/application.