

Project:	Catalogue #:	Type:
Notes:		

Product Description

Commercial-grade, recessed, lay-in coffered T-Bar troffer with modern styling and high visual comfort featuring a single shallow semi-round lens. For use with indoor applications where low-glare, high-quality and ease of installation are required. This IC-rated luminaire's low-profile design makes it ideal for shallow or obstructed plenum applications. Designed for 9/16" and 15/16" T-bar applications.

Applications

Office Areas, Retail Stores, Classrooms, Hospitals, Nursing Homes



Features

- Shallow design
- Extruded acrylic lens
- Standard low voltage dimming (0-10v), 10%
- 80+ CRI
- Available in 1x4, 2x2, and 2x4 configurations
- For use in insulated ceilings
- Room side access for driver compartment
- Enhanced, uniform lighting delivers a balanced amount of light to walls, cubicles, work surfaces and people

Featured Options

- 1% dimming
- Air handling
- Optional basket/lenses, see ordering key

Optical System

Round linear ribbed frosted acrylic diffuser, offers high levels of efficiency and visual comfort. Indirect reflectors are precision formed and contoured to provide soft, low-glare, indirect illumination, while maintaining high-efficiency and a wide, uniform light distribution. Other lens options available (see ordering key on page 2).

Mounting

This luminaire has been specifically designed for T-Bar applications. Holes provided for chain-mounting support to building structure with integral earthquake clips.

Construction

Die-formed, code gauge steel housing. Precision-formed steel reflector.

Finish

White, polyester powder painted housing.

Electrical

Long life LEDs coupled with high efficiency drivers provide quality illumination. Rated to deliver L80 performance > 60,000 hours. Total harmonic distortion < 15%. Operating temperature ranked from 0C to 35C.

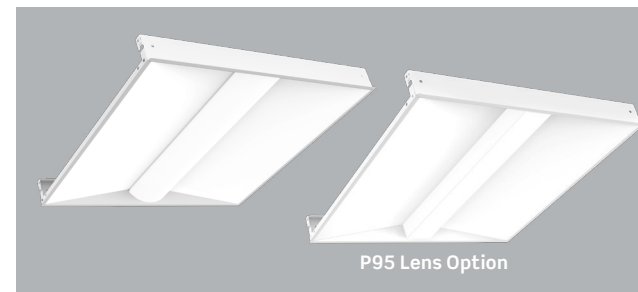
Warranty

5 year limited warranty. For complete warranty, click here: 

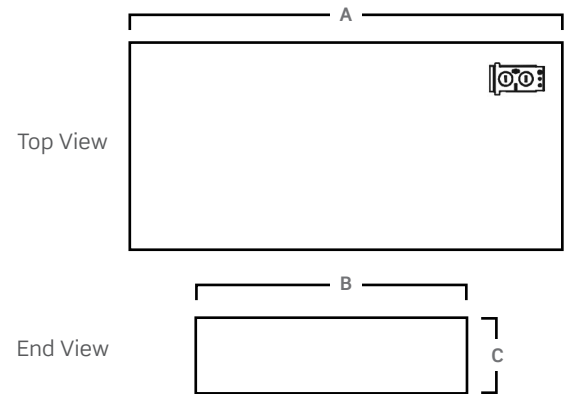
Approvals

- Approved to CSA/UL standards. UL listed for insulated ceilings.
- Tested in accordance to IESNA LM-79.
- Suitable for damp locations.
- DesignLights Consortium® Qualified.

All configurations may not be DLC qualified. Check www.designlights.org/QPL for qualified configurations



Dimensions



Size	A	B	C
1x4	47 3/4"	11 3/4"	2 1/2"
2x2	23 3/4"	23 3/4"	2 1/2"
2x4	47 3/4"	23 3/4"	2 1/2"
30x30	29 3/4"	29 3/4"	2 1/2"
20x60	59 3/4"	19 3/4"	2 1/2"
750x750	744mm	744mm	64mm
500x1500	1494mm	494mm	64mm

Consult installation guide for exact dimensions.

Project:	Catalogue #:	Type:
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Order Key

EXAMPLE: LRTH2x4- LED840K050LUNV-P90



- Type**
- Size (Width x Length)**
 - 1x4
 - 2x2
 - 2x4
 - 30x30
 - 750x750
 - 20x60*
 - 500x1500*
- CRI**
 - 8 - (80+)
 - 9 - (90+)^
- CCT**
 - 30K - 3000K
 - 35K - 3500K
 - 40K - 4000K
 - 50K - 5000K
 - 2765KT - 2700-6500 K (Tunable White)***
- Voltage**
 - UNV - 120-277V
 - 347 - 347V
- Options**
 - Driver Options**
 - 0-10V, 10% dimming standard
 - B03(01) 1% dimming
 - B15 Bi-Level Step Dimming (50/100)** (Not available for 347V)
 - B39 Emergency Lighting Battery Pack - LED (90 minutes @ 10W)
 - B02 Dimming Addressable Digital (DALI) (Not available for 347V)*
 - Air Handling Options**
 - A1 Air Supply/Return Slots (Consult factory for 1x4)
 - Housing Construction Options**
 - C45 Housing for tegular tiles
 - C32 Chicago Plenum
 - C79 Full Length LEDs (for 20x60 or 500x1500)
 - Finish Options**
 - F37 Matte white antimicrobial
 - Packaging Options**
 - K0 Bulk Pack/Pallet Packed and/or Wrapped
 - Lens Options**
 - Round Ribbed Frosted Acrylic Standard
 - P90 Wide Round Linear Ribbed Frosted Acrylic
 - P95 Frosted Polycarbonate Square Lens (Narrow)
 - P95 (W) Frosted Polycarbonate Square Lens (Wide)
 - Wiring Options**
 - V100 Flexible Armored Steel Cable Whip (6Ft. x 5-Wire)
 - V101 Flexible Armored Steel Cable Whip (6Ft. x 6-Wire) (For use with emergency battery pack)
 - Controls Options**
 - For advanced wireless controls [Click Here](#).
 - V77 Solo PIR Occupancy with Daylight Harvesting
 - V68 Microwave Occupancy with Daylight Harvesting

* Includes filler plates. Select C79 for full length illumination.

*Custom Lumens		
Size	Nominal Lumens Range	Watts
1x4	2000 - 6000	14 - 40
2x2	2000 - 5500	14 - 37
2x4	3200 - 13400	20 - 107

*5400lm Example:
LRTH1x4-LED840K054LUNV
Custom lumen packages are 1% dimming standard

Surface Kits (Ordered Separately)	
Size (Width x Length)	Item No.
1x4	KIT00326
2x2	KIT00327
2x4	KIT00316

Flange Kits (Ordered Separately)	
Size (Width x Length)	Item No.
1x4	KIT00136
2x2	KIT00137
2x4	KIT00138

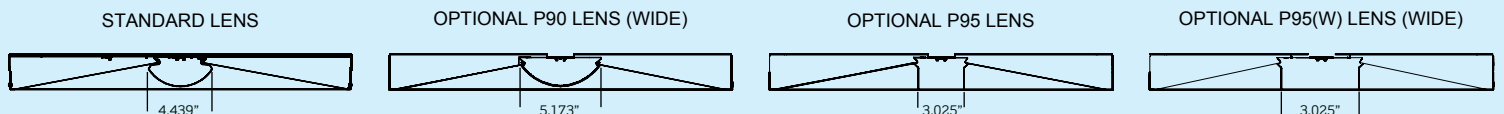
- Standard Lumens**
 - 1x4: 040L - 4000
 - 2x2: 032L - 3200, 040L - 4000
 - 2x4: 040L - 4000, 072L - 7200
 - 30x30: 032L - 3200
 - 750x750: 032L - 3200
- HP Lumens**
 - 1x4: 020L - 2000, 047L - 4700, 050L - 5000, 060L - 6000
 - 2x2: 020L - 2000, 037L - 3700, 045L - 4500, 050L - 5000
 - 2x4: 050L - 5000, 080L - 8000, 085L - 8500, 100L - 10000, 120L - 12000
 - 20x60: 050L - 5000
 - 500x1550: ---L*

**Not available for 347V. Consult factory for configuration details.
*** When Selecting 2765KT, if a tunable white-compatible control is not selected the luminaire will come standards with two sets of 0-10V wires for dimming and color tuning (see tunable white diagram for details). For compatible control options please consult factory.

^ 90+ CRI reduces lumen output by 20%, not available with 5000K
*Consult factory for lead times and availability

Other options may be available, consult factory. Specifications and data subject to change without notice.

Lens Options



Project:	Catalogue #:	Type:
Notes:		

Performance Data

LED Performance Data				
Size	Nominal Lumens	Delivered Lumens	Watts	Lumens Per Watt
1x4	2000	2037	13	152
	4000	3968	28	143
	4700	4701	34	139
	5000	5027	37	138
	6000	6008	43	141
2x2	2000	2047	13	156
	3200	3178	21	151
	3700	3710	25	148
	4000	4058	28	146
	4500	4504	31	144
	5000	5076	36	142
2x4	4000	4135	28	149
	5000	5036	35	145
	7200	7214	50	144
	8000	8008	57	141
	8500	8552	58	148
	10000	10072	70	145
	12000	12037	81	148
20x60 500x1500	5000	5036	35	145
30x30 750x750	3200	3178	21	151

Performance Scaling Factor

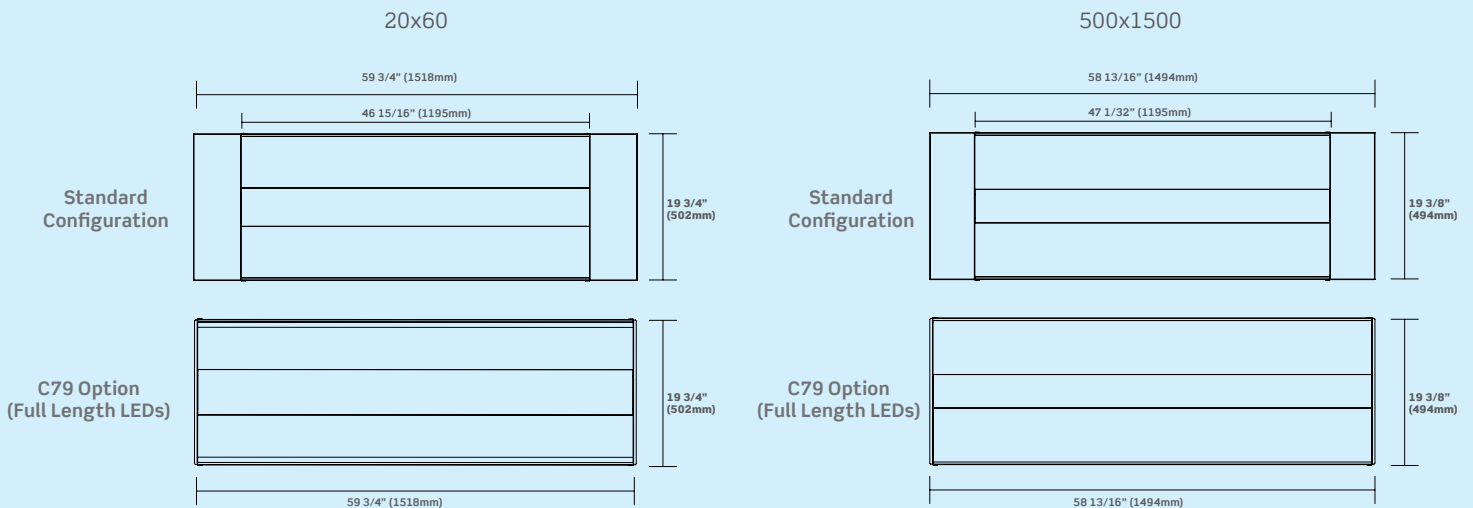
	50K	40K	35K	30K
80CRI	1.000	1.000	0.960	0.946
90CRI	0.875	0.875	0.836	0.809

Lifetime Expectancy

	Calculated Hours	Reported Hours
L70	≥ 238,000	> 60,000
L80	≥ 149,000	> 60,000
L90	≥ 71,000	> 60,000

Values based on 840K with standard lens at 25C

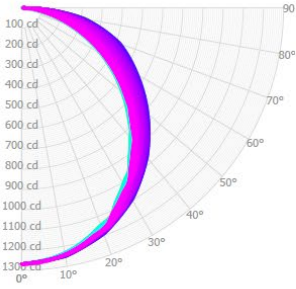
Filler Pan & Full-Length Options



Project:	Catalogue #:	Type:
Notes:		

Photometrics

IES File: **LRTH2X2-LED840K032LUNV**
 Lumens: **N/A**
 Wattage: **30**
 Efficacy: **124**



Zonal Lumen Summary

Zone	Lumens	
0.0° - 30.0°	979	26.2%
0.0° - 40.0°	1596	42.8%
0.0° - 60.0°	2810	75.3%
0.0° - 90.0°	3732	100.0%

**Average Luminance Table (cd/m2)
CP Summary**

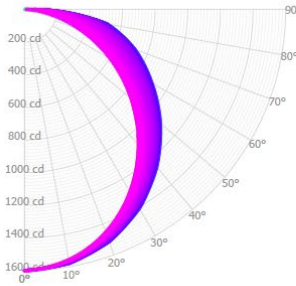
	0.00°	45.00°	90.00°
0.00°	3521	3521	3521
45.00°	3006	3238	3460
55.00°	2757	3134	3482
65.00°	2382	3133	3707
75.00°	1779	3499	4398
85.00°	346	4255	5302

Coefficients of Utilization

pc	80%			80%			70%									
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	30%	
pw	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4
0	4443	4443	4443	4443	4339	4339	4339	4339	4146	4146	4146	3970	3970	3970	3808	3808
1	4022	3829	3655	3499	3919	3743	3585	3441	3582	3451	3331	3435	3328	3229	3213	3132
2	3642	3316	3046	2820	3541	3244	2996	2785	3110	2900	2719	2985	2810	2656	2871	2725
3	3313	2901	2583	2329	3218	2841	2546	2308	2728	2474	2266	2623	2407	2225	2526	2343
4	3029	2565	2225	1966	2941	2515	2197	1952	2419	2143	1924	2331	2091	1897	2249	2042
5	2784	2290	1944	1689	2704	2247	1922	1679	2166	1880	1660	2092	1839	1641	2022	1800
6	2571	2060	1718	1472	2498	2024	1701	1465	1956	1667	1452	1892	1635	1438	1832	1604
7	2384	1868	1534	1299	2318	1837	1520	1294	1779	1493	1284	1724	1467	1274	1673	1441
8	2219	1705	1381	1158	2160	1678	1369	1154	1628	1347	1147	1581	1326	1139	1537	1305
9	2074	1565	1253	1042	2020	1542	1243	1039	1499	1225	1033	1458	1207	1027	1420	1190
10	1945	1444	1144	945	1896	1424	1136	942	1387	1121	938	1352	1106	933	1318	1092

Effective Floor Cavity Reflectance: 20%

IES File: **LRTH2X4-LED840K050LUNV**
 Lumens: **N/A**
 Wattage: **36**
 Efficacy: **137**



Zonal Lumen Summary

Zone	Lumens	
0.0° - 30.0°	1238	25.1%
0.0° - 40.0°	2029	41.1%
0.0° - 60.0°	3623	73.4%
0.0° - 90.0°	4939	100.0%

**Average Luminance Table (cd/m2)
CP Summary**

	0.00°	45.00°	90.00°
0.00°	2202	2202	2202
45.00°	1896	2060	2239
55.00°	1760	2035	2317
65.00°	1567	2094	2533
75.00°	1251	2424	3039
85.00°	521	3278	3661

Coefficients of Utilization

pc	80%			80%			70%									
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	30%				
pw	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4
0	5879	5879	5879	5879	5743	5743	5743	5743	5488	5488	5488	5254	5254	5254	5040	5040
1	5299	5033	4794	4578	5160	4919	4700	4503	4705	4524	4359	4509	4361	4224	4328	4208
2	4787	4343	3976	3667	4652	4247	3909	3622	4068	3782	3536	3903	3663	3453	3750	3551
3	4347	3790	3359	3016	4220	3710	3310	2987	3559	3215	2933	3420	3126	2880	3290	3041
4	3971	3345	2887	2537	3853	3278	2850	2518	3151	2777	2482	3033	2709	2446	2923	2643
5	3647	2982	2517	2174	3539	2925	2488	2161	2818	2432	2136	2718	2378	2112	2624	2327
6	3365	2680	2221	1891	3268	2632	2198	1882	2541	2153	1864	2456	2111	1847	2377	2070
7	3119	2428	1980	1666	3031	2387	1962	1659	2309	1926	1646	2237	1891	1633	2168	1858
8	2903	2214	1781	1483	2823	2179	1766	1478	2113	1737	1468	2050	1708	1459	1991	1681
9	2712	2031	1614	1333	2640	2001	1602	1329	1944	1578	1321	1890	1555	1314	1839	1532
10	2542	1874	1474	1207	2478	1848	1463	1204	1798	1443	1198	1751	1424	1192	1706	1405

Effective Floor Cavity Reflectance: 20%

Tunable White

When Selecting 2765KT, if a tunable white-compatible control is not selected the luminaire will come standard with two sets of 0-10V wires for dimming and color tuning. For compatible control options please consult factory.

Dim and CCT control wire colors are subject to change without notice. All control wires are marked per the parentheses.

