



# 2x4 LPEC

## Low Profile Recessed Troffer



OVERVIEW	
Lumen Range (lm)	2,900 - 9,800
CCT (K)	3000, 3500, 4000, 5000 Tunable White
Wattage Range (W)	24 - 69
Efficacy Range (LPW)	123 - 144
Weight lbs (kg)	22 (10)

### QUICK LINKS

[Ordering Guide](#)[Performance](#)[Photometrics](#)[Dimensions](#)

### FEATURES & SPECIFICATIONS

#### Construction

- Rigid housing is die-formed 22-gauge cold-rolled steel for consistency and strength.
- Luminaire comes equipped with integral NEC-compliant earthquake clips.
- Ultra-slim (< 4") luminaire height and light-weight design effectively targets a broad range of plenum/wall spaces and allows for easy installation.
- Thermally optimized housing allows for direct insulation contact (IC rated).
- Luminaire is treated with phosphate rust inhibitor prior to powder coating. Reflecting surfaces are coated with high-reflectance (minimum 92%) white polyester powder.
- Luminaire is proudly manufactured in the U.S.A.

#### Optical System

- High-transmission diffuse acrylic radial lens eliminates bright spots from individual LEDs and provides high vertical illuminance and visual comfort.
- Tunable White with digital control option with a CCT range of 2700K - 6500K
- State of the art LED chips for reliability and extended lumen maintenance.

#### Electrical

- High-performance driver features over-voltage, under-voltage, short-circuit and over temperature protection.
- 0-10V dimming (1% - 100%) standard.
- Standard Universal Voltage (120-277 VAC) or optional High Voltage (347 VAC) 50/60

Hz input.

- L80 Calculated Life: >100k Hours (See lumen maintenance table on Page 3).
- Total harmonic distortion (THD): <20%
- Power factor: > 0.95
- Sensor-ready drivers available; consult factory for details.
- Optional 120-277VAC integral emergency battery backup is available to meet critical life-safety standby lighting requirements. A test switch/indicator button is installed in the housing for ease of visibility and maintenance.

#### Controls

- Available with AirLink™ Blue. AirLink Blue (ALB) is a low-power wireless Bluetooth mesh control system. ALB provides significant energy savings while ensuring code compliance and security. The integrated fixture sensor module can control multiple luminaires based on motion or daylight and events can be scheduled based on time of day or an astronomical clock.
- Available with 3rd party controls. Check out the ordering guide for compatibility.
- Tunable White powered by LSI Airlink™ Blue offers wireless digital CCT tuning between 2700K and 6500K. Tunable White technology provides ultimate flexibility and control to the end user and future-proofs any space.
- Stand-alone integral passive infrared sensor (IMS1) enables motion and daylight sensing. Optional IR remote (REM-SOLO) makes configuration changes easy.

- LSI AirLink™ controls featuring Lutron Clear Connect makes each luminaire controllable, creating a wireless communication network with other AirLink™ control devices such as dimmers, switches, occupancy sensors and photocontrols. The integrated sensor is both a passive infrared motion detector and daylight harvester.

#### Installation

- Luminaire installs by lifting it through grid ceiling and resting it on the T-bars.
- Luminaire installs onto standard 15/16" and narrow 9/16" T-grid ceiling systems.
- An accessory flange kit is available for installing into drywall or plaster.

#### Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to <https://www.lsiindustries.com/resources/terms-and-warranty.aspx> for more information.

#### Listings

- Listed to UL® 1598 and UL® 8750.
- DesignLights Consortium® (DLC) Premium and/or standard. Not all versions of this product may be DLC listed. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which SKUs are listed.
- Meets Buy American Act (BAA) requirements.
- Title 24 Compliant; see local ordinance for qualification information.
- IC Rated for direct contact with building insulation.
- Suitable for damp locations.



# 2x4 LPEC Low Profile Recessed Troffer

## ORDERING GUIDE

[Back to Quick Links](#)TYPICAL ORDER EXAMPLE: **LPEC24 LED 80L UNV DIM1 TW ALBC U**

Family/Size	LED Gen	Lumen Package*	Voltage	Driver	Color Temperature	Controls	Options	Packaging
LPEC24 - (2x4)	LED	30L - 3,000 35L - 3,500 40L - 4,000 48L - 4,800 55L - 5,500 60L - 6,000 65L - 6,500 72L - 7,200 80L - 8,000 85L - 8,500 90L - 9,000	UNV - 120-277VAC HV - 347VAC <sup>1</sup>	DIM1 - Dims to 1% (0-10 volt dimming) <sup>1</sup>  LDE1 - Hi-Lume 1% (with Soft on Fade to Black) <sup>1</sup>  L3D - Lutron Hi-Lume 1% <sup>1</sup>  SR - Sensor Ready <sup>3,5</sup>	30 - 3000K <sup>3,4</sup> 35 - 3500K 40 - 4000K 50 - 5000K	BLANK - (No Controls)  IMS1 - Integral PIR Motion and Daylight sensor  ALBCSD - Integrated AirLink™ Blue Wireless Motion and Daylight Harvesting Sensor  WSCS - Wattstopper LMFS-601 integrated wireless PIR motion/daylight sensor  AVC - Avi-on LVFA integrated wireless controller single channel  AVCM - Avi-on IFA integrated wireless controller 5 Amp 120-277VAC  ALDCS - AirLink/Lutron Integral Fixture Control with motion and daylighting sensing  ALDC - AirLink/Lutron Integral Fixture Control (RF only)	EM10- 10 Watt Emergency Battery Backup  FC1 - 6' 3/8" (3) #18 Leads (For use in Non-Dimming Applications)  FC15D - 6' 3/8" (5) #18 Leads (For use in Dimming Applications)  FC16DEM - 6' 3/8" (6) #18 Leads (For use in Dimming & EM Applications)  90C - 90 CRI <sup>3,4</sup>  AR - Air Return  SM - Integrated Surface Mount	U - Single Pack
		Custom Lumen Packages <sup>6</sup>						
LPEC24 - (2x4)	LED	80L - 8,000	UNV - 120-277VAC	DIM1 - Dims to 1% (0-10 volt dimming) <sup>1</sup>	TW <sup>1,7</sup> - Tunable White	ALBC <sup>7</sup>	90C - 90 CRI <sup>3,4</sup>	U - Single Pack

### Accessory Ordering Information

Description	Order Number
Flange Kit 2x4	FK24
IR remote configuration tool for IMS1	REM-SOLO
SMK24 - 2x4 Surface Mount Kit	772278

Integral PIR Motion and Daylight Sensor (IMS1). Low profile sensor provides bi-level control based on motion and/or daylight. All control parameters are adjustable using the IR remote (sold separately).

[Click here to learn more about IMS1](#)

### AirLink™ Control Accessories Order as separate catalog number.

Wireless Switches	Catalog Number	Part Number	Wireless Occupancy Sensors	Part Number
On/Off & Raise Lower	ALWS 3B-(color)-KIT <sup>2</sup>	6241032	Wireless 360° 400 ft <sup>2</sup> , Ceiling Mount	624094
			Wireless 180° 3000 ft <sup>2</sup> , Wall Mount	632617
Wireless Photocell Controls	ALCM-W-PC	624090	Wireless 90° 2500 ft <sup>2</sup> , Corner Mount	624096
			Wireless, Hallway 150 ft Length	632620
<b>Commission Laser Kit</b>				
(See Laser warnings)		634574		

#### FOOTNOTES:

- 1 - Not available with ALDCS Control option.
- 2 - Available colors are White, Ivory and Light Almond (WH, IV, LA).
- 3 - Consult Factory for lead times.
- 4 - Consult factory for DLC qualification information.
- 5 - Required with ALDCS Control option.
- 6 - Custom lumen packages available, please consult factory. Values are within industry standard tolerances and not DLC listed.
- 7 - Only available with 120-277VAC input

### PERFORMANCE

DELIVERED LUMENS									
Lumen Package	3000K CCT		3500K CCT		4000K CCT		5000K CCT		Wattage
	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	
30L	2,940	123.0	3,070	128.5	3,033	126.9	3,264	136.6	23.9
35L	3,440	122.0	3,592	127.4	3,549	125.9	3,820	135.4	28.2
40L	3,891	121.2	4,063	126.6	4,014	125.0	4,320	134.6	32.1
48L	4,700	129.5	4,908	135.2	4,849	133.6	5,219	143.8	36.3
55L	5,378	128.0	5,616	133.7	5,548	132.1	5,971	142.2	42.0
60L	5,873	126.8	6,133	132.5	6,059	130.9	6,521	140.8	46.3
65L	6,322	126.7	6,602	132.3	6,522	130.7	7,019	140.7	49.9
72L	7,120	124.9	7,436	130.5	7,346	128.9	7,906	138.7	57.0
80L	7,832	123.5	8,179	129.0	8,080	127.4	8,696	137.2	63.4
85L	8,314	129.3	8,682	135.0	8,577	133.4	9,231	143.6	64.3
90L	8,800	128.5	9,190	134.2	9,079	132.5	9,771	142.6	68.5

\*LED Chips are frequently updated therefore values are nominal.



# 2x4 LPEC Low Profile Recessed Troffer

## PERFORMANCE (CONT.)

[Back to Quick Links](#)

ELECTRICAL DATA*						
Lumens	Watts	120V	208V	240V	277V	347V
30L	23.9	0.199	0.115	0.100	0.086	0.069
35L	28.2	0.235	0.136	0.118	0.102	0.081
40L	32.1	0.268	0.154	0.134	0.116	0.093
48L	36.3	0.303	0.175	0.151	0.131	0.105
55L	42.0	0.350	0.202	0.175	0.152	0.121
60L	46.3	0.386	0.223	0.193	0.167	0.133
65L	49.9	0.416	0.240	0.208	0.180	0.144
72L	57.0	0.475	0.274	0.238	0.206	0.164
80L	63.4	0.528	0.305	0.264	0.229	0.183
85L	64.3	0.536	0.309	0.268	0.232	0.185
90L	68.5	0.571	0.329	0.285	0.247	0.197

ELECTRICAL DATA* - TUNABLE WHITE					
Lumens	Watts	120V	208V	240V	277V
80L	63.00	0.53	0.30	0.26	0.23

\*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

APPLICATION REFERENCE*						
Lumens	Spacing	Lumens	LPW	W/FT2	Avg Fc	# of Luminaires
48L	12' x 10'	4,848	134	0.363	45	16
48L	10' x 8'	4,848	134	0.454	56	20
48L	10' x 6'	4,848	134	0.544	67	24

\*Based on a 9' Mtg.Ht., 4K color Temp, 80/50/20 reflectances, 2.5' work plane, LLF:1.0, 40' x 40' Room

RECOMMENDED LUMEN MAINTENANCE <sup>1</sup>					
Ambient Temp C	0 hrs. <sup>2</sup>	25K hrs. <sup>2</sup>	50K hrs. <sup>3</sup>	75K hrs. <sup>3</sup>	100K hrs. <sup>3</sup>
25	100.00%	95.14%	92.57%	90.07%	87.64%

RECOMMENDED LUMEN MAINTENANCE <sup>1</sup> - TUNABLE WHITE					
Ambient Temp C	0 hrs. <sup>2</sup>	25K hrs. <sup>2</sup>	50K hrs. <sup>3</sup>	75K hrs. <sup>3</sup>	100K hrs. <sup>3</sup>
25	100.00%	95%	91%	87%	83%

- 1 - Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.  
 2 - In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).  
 3 - In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times NA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).

SCALING FACTORS - TUNABLE WHITE		
CCT	Lumens	Wattage
2700K	0.95	1.05
3000K	0.97	1.02
3500K	0.99	1.01
4000K	1.00	1.00
5000K	1.00	1.01
6500K	0.98	1.05



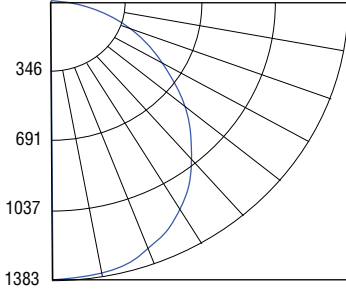
# 2x4 LPEC Low Profile Recessed Troffer

## PHOTOMETRICS

[Back to Quick Links](#)

All published luminaire photometric testing performed to IESNA LM-79 standards by a certified laboratory. For complete specifications and IES files, see website. See <http://www.lsi-industries.com/products/led-lighting-solutions.aspx> for detailed photometric data.

### LPEC24 LED 48L 40



ZONAL LUMEN SUMMARY		
Zone	Lumens	% Luminaire
0-20	509.3	10.5
0-30	1,107.4	22.8
0-40	1,862.4	38.4
0-60	3,494.6	72.1
0-80	4,664.7	96.2
0-90	4,848.5	100.0
10-90	4,719.1	97.3
20-40	1,353.1	27.9
20-50	2,181.1	45.0
40-70	2,317.3	47.8
60-80	1,170.1	24.1
70-80	485.0	10.0
80-90	183.8	3.8
90-180	0.0	0
0-180	4,848.5	100.0

## PRODUCT DIMENSIONS

[Back to Quick Links](#)

