#### L Ρ NNA С Ε RCHITECTURAL LIGHTING

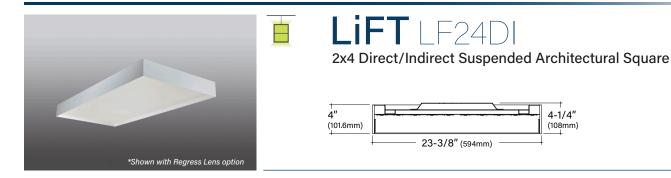
Project Name

Date

Туре

4-1/4"

(108mm)



#### **Key Features**

Formed and welded extruded aluminum housing for seamless finish with 1/4" trim

- Aluminum top cover conceals all electrical components
- Highly reflective die-formed white painted steel reflector
- Fabricated, captive lens with 3 lens positions
- LiFT offered with a 5-year limited warranty. Covers LED, driver and fixture
- ETL Listed conforming to UL1598 in US and CSA 250 in Canada
- Maximum fixture weight is 50 lbs
- Room-side maintenance for LED system
- Buy American Act compliant



Example Part #: LF24DI-A-830HO-830-AC448JB-U-PL2-1-0-W

LF24DI -		_	_	_	_	_	_	_	_	_	_	_
	DIRECT SHIELDING	INDIRECT SHIELDING	DIRECT SOURCE	INDIRECT SOURCE	MOUNTING	VOLTAGE	DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH	FIXTURE OPTIONS	CONTROLS

	LO		
DIRECT SHIELDING	INDIRECT SHIELDING	DIRECT SOURCE <sup>1</sup>	INDIRECT SOURCE <sup>1</sup>
A - Flush Satine Lens AL - Drop Satine Lens AR - Regress Satine Lens Direct Shielding pg. 2	<b>LO</b> - Clear Lens Overlay Indirect Shielding pg. 2	<b>_27</b> 2700K <b>_30</b> 3000K <b>_35</b> 3500K <b>_40</b> 4000K <b>CL</b> Custom Lumens <b>CW</b> Custom Watts <i>Direct Source pg. 2</i>	<b>_27</b> 2700K <b>_30</b> 3000K <b>_35</b> 3500K <b>_40</b> 4000K <b>CL</b> Custom Lumens <b>CW</b> Custom Watts <i>Indirect Source pg. 3</i>
			-
<b>MOUNTING</b> <sup>2</sup>	VOLTAGE	DRIVER	CIRCUITING
AS4 • 4 AC, Straight, JB or ST AC4 • 4 AC, Center Mount, JB or ST AH4 • 4 AC w/hub, to JB or ST PP • Pendant Pipe to JB or ST PS • Pendant Swivel to JB or ST <i>Mounting pg.</i> 3	U - Universal (120 thru 277V) 1 - 120V 2 - 277V 3 - 347V Voltage pg. 4	FSD - Factory Select Driver (1%, 0-10v)         PL2 - Advance Xitanium (1%, 0-10v)         EE1 - eldoLED ECOdrive (1%, 0-10v)         ES1 - eldoLED SOLOdrive (0%, 0-10v)         LH1 - Lutron Hi-lume (1%, EcoSystem)         OL2 - Osram Optotronics (1%, 0-10v)         DL4 - Osram Optotronics 347v (1%, 0-10v)         Driver pg. 4	<ul> <li>1 - Single Circuit</li> <li>2 - Dual Circuit</li> <li>E - Emergency (entire fixture)</li> <li>N - Night Light (entire fixture)</li> <li>Circuiting pg. 4</li> </ul>
BATTERY & EMERGENCY	FINISH	FIXTURE OPTIONS	CONTROLS <sup>3</sup>
<b>0 -</b> None <b>1PB -</b> Bodine 10W	<b>W -</b> White <b>S -</b> Metallic Silver	<b>AM -</b> Antimicrobial Paint <b>DSP -</b> Customer Supplied Battery/Driver/	DLMFC - Wattstopper DLM (wired) ENLI - Enlighted IOT (remote)

1PB - Bodine 10W	S - Metallic Silver	DSP - Customer Supplied Battery/Driver/	ENLI - Enlighted IOT (remote)
FSG - Factory Select ALCR	BL - Textured Black	Sensor	<b>ENLC -</b> Enlighted Connected Lighting ( <i>remote</i> )
GI - Iota ETS DR	BR - Bronze	GMF - Slow Blow Fusing	Controls pg. 5
GB - Bodine GTD	GR - Graphite	Fixture Options pg. 5	
Battery & Emergency pg. 4	CC - Custom Color		
	Finish pg. 5		

When specifying SOURCE the first \_ is for specifying either 8 - 80CRI, 9 - 90CRI. The ending \_ are for specifying output, example HO - High Output. See output charts for more information. <sup>2</sup>Example: AC4120JB. AC4 = 4 Aircraft Cables, 120 = 120° long cables, JB = connects to junction box. Standard AC cable lengths are 48° and 120°, field adjustable. Standard pendant lengths are 12°, 18°, or 24°. <sup>3</sup>Controls can only be used with Single Circuit (1) or Emergency Circuit (E), cannot be used with any battery options. See Controls chart on page 5 for driver options and more information.

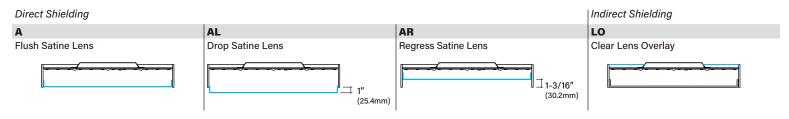
Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions



# Shielding

Fabricated, captive lens with 3 lens positions

Highly reflective white reflectors maintain uniform lens brightness



## **Direct Source: White LED**

Specify either 80 or 90 CRI

940HO

4000K

9378

91.2

103

Longer lead-time may apply for 90 CRI. Consult factory

80 CRI = R9≥19 and 90 CRI = R9≥61

Custom	Output-	Lumens (	<b>DR Watta</b>	ge	
CL	Specify C	RI, CCT and o	desired lume	ns (i.e. CL835	52000) Specify lumens between standard offering listed below. Lumens are specified per color temp
CW				age (i.e. CW94	
80 CRI					
	Color	Lumono	Chielding		
	Color	Lumens	Shielding		
			Satine Len	e	
			Watts	LPW	
830LO	3000K	4658	37.3	125	
B30MO	3000K	7499	63.1	119	
830HO	3000K	10261	90.6	113	
B35LO	3500K	4824	37.4	129	
835MO	3500K	7862	63.1	125	
B35HO	3500K	10899	90.6	120	
840LO	4000K	5055	37.5	135	
840MO	4000K	8150	63.5	128	
840HO	4000K	11224	91.5	123	
90 CRI					
927LO	2700K	3783	37.5	101	
927MO	2700K	6099	63.4	96	
927HO	2700K	8370	90.9	92	
930LO	3000K	4033	37.5	108	
930MO	3000K	6512	63.4	103	
930HO	3000K	8954	90.9	98	
935LO	3500K	4033	37.5	108	
935MO	3500K	6512	63.4	103	
935HO	3500K	8954	90.9	98	
940LO	4000K	4247	37.3	114	
940MO	4000K	6839	63.3	108	

#### Indirect Source: White LED

Specify either 80 or 90 CRI

Longer lead-time may apply for 90 CRI. Consult factory

- 80 CRI = R9≥19 and 90 CRI = R9≥61
- Indirect has clear lens overlay

#### Custom Output- Lumens OR Wattage

CL	Specify CRI, CCT and desired lumens (i.e. CL8352000)	Specify lumens between standard offering listed below. Lumens are specified per color temp
CW	Specify CRI, CCT and desired wattage (i.e. CW94020)	Specify watts between standard offering listed below

80 CRI

	Color	Lumens		
			LO	
			Clear Lens	Overlay
			Watts	LPW
830LO	3000K	4055	28.4	143
830MO	3000K	5962	41.2	145
830HO	3000K	7791	55.8	140
835LO	3500K	4223	28.4	149
835MO	3500K	6220	41.2	151
835HO	3500K	8143	55.7	146
840LO	4000K	4338	28.3	153
840MO	4000K	6380	41.2	155
840HO	4000K	8284	55.7	149

**90 CRI** 

927LO	2700K	3358	28.4	118
927MO	2700K	4939	41.2	120
927HO	2700K	6413	55.8	115
930LO	3000K	3536	28.4	125
930MO	3000K	5200	41.2	126
930HO	3000K	6752	55.8	121
935LO	3500K	3536	28.4	125
935MO	3500K	5200	41.2	126
935HO	3500K	6752	55.8	121
940LO	4000K	3761	28.4	132
940MO	4000K	5531	41.2	134
940HO	4000K	7182	55.8	129

## Mounting

 Aircraft cables and pendants mount directly to a standard junction box or structure

- Canopies and pendants match fixture finish, power cords are white, grey, or black depending on fixture finish. See Finish section for additional details.
- Must specify overall pendant length of 12", 18" or 24"
- Must specify cable length, either 48" or 120" standard, field adjustable
- Tie off fixture to structure with retention wires
  Maximum fixture weight is 50 lbs
- AS4\_\_JB
   AC4\_\_JB
   AH4\_\_JB
   PP\_\_JB

   4 AC cables straight, fixture to J-Box
   4 AC cables, center mount, fixture to J-Box
   4 AC cables with hub, fixture to J-Box
   Pendant Pipe to J-Box

   PS\_\_JB
   Pendant Swivel to J-Box
   Pendant Swivel to J-Box
   Pondant Swivel to J-Box

			Pendant Swiver to J-Box
AS4ST	AC4ST	AH4ST	PPST
4 AC cables straight, fixture to Struc-		4 AC cables with hub, fixture to Struc-	Pendant Pipe to Structure
ture	Structure	ture	PSST
			Pendant Swivel to Structure

Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions. Designed in Denver, CO • USA | pinnacle-ltg.com | O: 303-322-5570 F: 303-322-5568

## Voltage

Some LIFT configurations will not accommodate all voltage options; consult with factory

U	Universal
1	120 volt
2	277 volt
3	347 volt

#### Driver

- Standard Driver Option = FSD
- Driver Lifetime: 50,000 hours at 25°C ambient operating conditions
- For more Driver options, see Pinnacle Resource Guide on download pages

at pinnacle-ltg.cor	n
---------------------	---

0-10V Drivers	
FSD	Factory Select Driver 1%, 0-10v
PL2	Advance Xitanium 1%, 0-10v
PL4	Advance Xitanium 347v 1%, 0-10v, requires 347v
OL2	Osram Optotronic, 1%, 0-10v
OL4	Osram Optotronic 347v, 1% 0-10v, requires 347v option
EE1	eldoLED ECOdrive 1%, 0-10v Logarithmic
EE2	eldoLED ECOdrive 1%, 0-10v Linear
ES1	eldoLED SOLOdrive 0-10v, 0% Logarithmic
ES2	eldoLED SOLOdrive 0-10v, 0% Linear
<b>DALI Drivers</b>	
EE3	eldoLED SOLOdrive .1%, DALI (logarithmic)
EE4	eldoLED SOLOdrive .1%, DALI (linear)
OD1	Osram Optotronic 1%, DEXAL
OD2	Osram Optotronic 1%, DALI 2 Channel
<b>Lutron Driver</b>	S
LH1	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1
LH4	Lutron Hi-Lume 1%, 2-wire, Lutron-LTEA2W, 120v only
<b>Alternate Driv</b>	vers
OD1	Osram Optotronic 1%, DEXAL

## Circuiting

- Select fixture circuiting from options below
- Some LIFT configurations will not accommodate all circuiting options; consult with factory

1	Single Circuit
2	Dual Circuit
E	Emergency Circuit only
Ν	Night Light Circuit only

## Battery & Emergency

- Select battery or emergency options if required
- Battery duration is 90 minutes
- Test button is integral to fixture

0	No Battery					
1ILL	lota 10w Integral Lithium, Self Testing					
1IRH	lota 20w Remote					
1PLL	Bodine 10w Integral Lithium, Self Testing					
1PRH	Bodine 20w Remote					
FSG	Factory Select Automatic Load Control Relay (ALCR)					
GI	Emergency Transfer Switch (ETS) DR Emergency Control Device					
GB	Bodine GTD, Generator Transfer Device					

Some LIFT configurations will not accommodate all driver options; consult with factory

· For more Battery options, see Pinnacle Resource Guide on download pages at pinnacle-ltg.com

For Approximate Battery Lumen Output

- Multiply battery wattage X fixture LPW shown on Lumen Table
- 10 (watts) x 92.3 (LPW) = 923 battery lumen output

**Battery & Emergency Ordering Examples** 

Single circuit, 10w integral battery

- Ordering Code: 1-1P
- Emergency circuit only, 10w integral battery Ordering Code: E-1P

Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions. Designed in Denver, CO • USA | pinnacle-ltg.com | O: 303-322-5570 F: 303-322-5568



#### Finish

Standard powder-coat textured white, metallic silver, textured black, graphite or bronze painted finish; consult factory for chip of standard paint finishes
 Selecting a fixture finish other than white may impact lumen output; consult factory for more information

W	White (white cord/white canopy)			
S	Metallic Silver (grey cord/silver canopy)			
BL	Textured Black (black cord/black canopy)			
BR	Bronze (white cord/bronze canopy)			
GR	Graphite (white cord/graphite canopy)			
CC	Custom Color (white cord/color match canopy)			

## **Fixture Options**

Additional options to enhance the fixture and finish of the product

АМ	Antimicrobial Paint				
DSP	Customer Supplied Battery/Driver/Sensor				
GMF	Internal Slow Blow Fuse				

## Controls

- Pinnacle Lighting offers easy to specify network control solutions that connect to an intelligent centralized system to maximize lighting energy efficiencies or integral sensors for individual fixture control
- Pinnacle Lighting fixtures ship technology ready; comissioning by others
- Controls can only be used with Single Circuit (1) or Emergency Circuit (E)
   Contact factory for any non-standard configurations for layout, placement, or EM options
- One sensor per housing typical, contact factory for more information

	Solution	Components	Network/Sensor	Connection	RQD Drivers	Limitation
DLMFC	Legrand Wattstopper DLM	LMFC-011	Digital Lighting Management (DLM)	Wired, two RJ45 ports	OL2, OL4	None
ENLI	Enlighted IOT	CU-4E	Enlighted, Remote	Enlighted Cable	Any 0-10v	Not available with 347 volt
ENLC	Enlighted Connected Lighting	CU-4E	Enlighted, Remote	Enlighted Cable	Any 0-10v	Not available with 347 volt

## **Approvals & Certifications**

**Construction:** Formed 20 gauge cold rolled steel housing. Highly reflective die-formed white painted reflector. Wiring access available on top of housing. Lens is removable for room-side maintenance of lens, driver and LED boards.

Shielding: Single piece fabricated diffuse acrylic lens creating a fully luminous fixture.

**Mounting:** Aircraft cable and Pendant mount available. Aircraft Cable and pendant supplied with 5" (127mm) canopies. Refer to installation instructions for appropriate ceiling detail. Maximum fixture weight is 50 lbs.

**LED:** 25°C test environment. Lumen output/wattage has a margin of +/- 5%. All luminaire configurations tested in accordance with IES LM-79. Diodes tested in accordance with IES LM-80. Lifetime calculated using IES TM-21. Minimum lifetime greater than 60,000 hours. L70 = 146,500 hours and L90 = 45,000 hours. MacAdam 3-Step Ellipses. Not all products are Lighting Facts listed. For all available IES files, please visit our website at pinnacle-Itg. com.

**Color & Lumen Output:** Three lumen packages available. Low (LO), Middle (MO) and High (HO). Custom outputs are available. Specify custom lumens or watts between standard offering listed on CRI, CCT & Output page. 80 CRI is available for 3000K, 3500K, and 4000K. 90 CRI is available for 2700K, 3000K, 3500K, and 4000K. 80 CRI = R9 $\geq$ 19 and 90 CRI = R9 $\geq$ 61.

**Voltage:** Universal (U), 120 volt (1), 277 volt (2) and 347 volt (3) options available. Must specify OL4 in Driver section when 347 volt (3) is selected. Some LiFT configurations will not accommodate all voltage options; consult with factory.

**Driver:** Standard Driver Option is Advance 0-10V, 1% = PL2. Electronic driver, Power factor is >0.9 with a THD <20%. Driver Lifetime: 50,000 hours at 25°C ambient operating conditions. For more driver options, see Pinnacle Resource Guide on download pages at

pinnacle-ltg.com. Some LiFT configurations will not accommodate all driver options.

**Circuiting:** Select from single circuit (1), dual circuit (2), Emergency circuit (E) or Night Light circuit (N). Some LiFT configurations will not accommodate all circuiting options; consult with factory.

**Battery & Emergency:** Select battery or emergency options if required. If battery or emergency option is not required, enter 0. Battery duration is 90 minutes as standard. Test button is integral to fixture. For more Battery options, see Pinnacle Resource Guide on download pages at pinnacle-Itg.com.

**Finish:** Standard powder-coat textured white, metallic silver, textured black, graphite, or bronze painted finish, consult factory for chip of standard paint finishes. Contact factory for additional custom color and finish options.

**Controls:** DLM utilizes wired network connections for digital control through switching and dimming with 0-10v LED drivers. Enlighted Smart Sensor provides multi-functionality including daylight harvesting and PIR occupancy; for IOT platform using 0-10v LED drivers. Enlighted Smart Sensor provides multi-functionality including daylight harvesting and PIR occupancy; for Connected platform using 0-10v LED drivers.

Labels: ETL Listed conforming to UL1598 in US and CSA 250 in Canada. Approved for dry/damp location unless otherwise noted.

Fixture Weight: 50 lbs maximum.

#### **Buy American Act Compliant**

Warranty: LIFT LED offered with a 5-year limited warranty. Covers LED, driver and fixture.

Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions

Designed in Denver, CO • USA | pinnacle-ltg.com | O: 303-322-5570 F: 303-322-5568