#### L Ρ NN С Ε Α RCHITECTURAL LIGHTING

Project Name \_

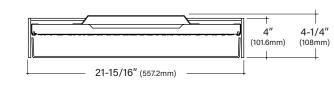
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24" Direct Suspended Architectural Round



## **Key Features**

Fixture Options pg. 4

- Aluminum housing is rolled and welded for seamless finish with 1/4" trim
- Aluminum top cover conceals all electrical components. Highly reflective die-formed white painted steel reflector
- FINA 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 25 lbs. Lift and shift lens allowing room-side maintenance for LED system .
- . Buy American Act compliant



Example Part #: F24D-A-930HO-AC348JB-U-FSD-1-0-W

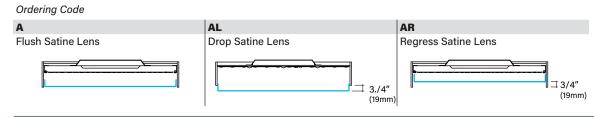
		EMERGENCY OPTIONS		
 SHIELDING	SOURCE <sup>1</sup>	MOUNTING <sup>2</sup>	VOLTAGE	
A - Flush Satine Lens L - Drop Satine Lens R - Regress Satine Lens <i>ihielding pg. 2</i>	927 2700K 930 3000K 935 3500K 940 4000K CL Custom Lumens CW Custom Watts Source pg. 2	AC3 • 3 AC to JB or ST AH4 • 4 AC w/hub to JB or ST PP • Pendant Pipe to JB or ST PS • Pendant Swivel to JB or ST S • Surface Mount WA • Wall Mount Mounting pg. 3	U - Universal (120 thru 277V) 1 - 120V 2 - 277V 3 - 347V Voltage pg. 3	
	-			
DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH	
FSD - Factory Select Driver (1%, 0-10v) PL2 - Advance Xitanium (1%, 0-10v) OL2 - eldoLED Optotronic (1%, 0-10v) OL4 - eldoLED Optotronic 347v (1%, 0-10v) EE1 - eldoLED ECOdrive (1%, 0-10v) ES1 - eldoLED SOLOdrive (0.1%, 0-10v) LH1 - Lutron Hi-lume (1%, EcoSystem) Driver pg. 3	<ul> <li>1 - Single Circuit</li> <li>E - Emergency (entire fixture)</li> <li>N - Night Light (entire fixture)</li> <li>Circuiting pg. 4</li> </ul>	<ul> <li>0 - None</li> <li>FSG - Factory Select ALCR</li> <li>GI - Iota ETS DR</li> <li>GB - Bodine GTD</li> <li>1PB - Bodine 10W</li> <li>Battery and Emergency pg. 4</li> </ul>	W - White S - Metallic Silver BL - Textured Black BR - Bronze GR - Graphite CC - Custom Color Finish pg. 4	
FIXTURE OPTIONS	CONTROLS <sup>3</sup>			
AM - Antimicrobial Paint DSP - Customer Supplied Battery/Driver/ Sensor GMF - Slow Blow Fusing	DLMFC - Wattstopper DLM (wired) ENLI - Enlighted IOT (remote) ENLC - Enlighted Connected Lighting (remote) Controls pg. 4			

When specifying SOURCE use the ending \_\_\_ are for specifying output, example HO - High Output. <sup>2</sup>Example: AC348JB. AC3 = 3 Aircraft Cables, 48 = 48" 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 4 for driver options and more information.

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# Shielding

- White virgin acrylic lens with matte finish, removable for LED access
- Lens available in 3 positions



# Source: White LED

• 90 CRI = R9≥50

940MO

940HO

4000K

4000K

2622

3605

29.1

41.3

90

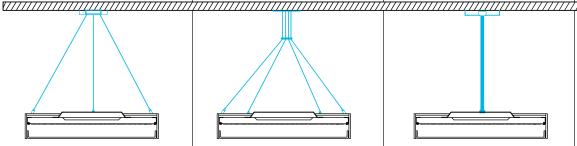
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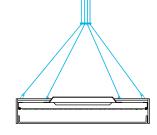
Custom Output- Lumens OR Wattage									
CL	Specify C	RI, CCT and	desired lun	nens (i.e. CL835	52000) Specify lumens between standard offering listed below. Lumens are specified per color temp				
CW		RI, CCT and	desired wa	ttage (i.e. CW94	04020) Specify watts between standard offering listed below				
90 CRI									
Color Shielding									
A, AL, AR Satine Lens									
	Lumens Watts LPW		LPW						
927LO	2700K	1497	17.2	87					
927MO	2700K	2526	29.2	86					
927HO	2700K	3472	41.5	84	-				
930LO	3000K	1508	17.1	88	-				
930MO	3000K	2548	28.9	88	-				
930HO	3000K	3504	41.0	86	-				
935LO	3500K	1508	17.1	88	-				
935MO	3500K	2548	28.9	88	-				
935HO	3500K	3504	41.0	86	-				
940LO	4000K	1551	17.2	90	-				

## Mounting

- Aircraft cables and pendants mount directly to a standard junction box or structure
- Canopies and pendants match fixture finish, power cords are white 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 25 lbs

AC3JB	AH4JB	PPJB	S			
3 AC cables to fixture to J-Box	4 AC cables with hub to fixture to J-Box	Pendant Pipe to J-Box	Surface Mount Ceiling			
		PSJB				
		Pendant Swivel to J-Box				
AC3ST	AH4ST	PPST	WA			
3 AC cables to fixture to Structure		Pendant Pipe to Structure	Surface Mount Wall			
	Structure	PSST				
		Pendant Swivel to Structure				





### Canopies

The canopy can be installed either below the ceiling plane or semi-recessed into the ceiling for a flush mount installation

- Standard kit can be installed either way
- Flush canopy installation is not available for fixtures installed below a grid rail

## Voltage

 Some FINA 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

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at pinnacle-ltg.com
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0-10V Drivers							
FSD	Factory Select Driver 1%, 0-10v						
PL2	Advance Xitanium, 1%, 0-10v						
OL2	eldoLED Optotronic, 1%, 0-10v						
OL4	eldoLED Optotronic 347v, 1% 0-10v, requires 347v option						
EE1	eldoLED ECOdrive 1%, 0-10v Logarithmic						
EE2	eldoLED ECOdrive 1%, 0-10v Linear						
ES1	S1 eldoLED SOLOdrive 0-10v, 0.1% Logarithmic						
ES2	eldoLED SOLOdrive 0-10v, 0% Linear						
<b>DALI Drivers</b>							
EE3	eldoLED ECOdrive .1%, DALI (logarithmic)						
ES3	eldoLED SOLOdrive 1%, DALI (logarithmic)						
Lutron Drivers							
LH1	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1						
LH4	Lutron Hi-Lume 1%, 2-wire, Lutron-LTEA2W, 120v only						

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

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# Circuiting

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

1	Single 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 remote to fixture

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

0	No Battery				
FSG	Factory Select Automatic Load Control Relay (ALCR), UNV				
GI Emergency Transfer Switch (ETS) DR Emergency Control Device, UNV		Fo			
GB	Bodine GTD, Generator Transfer Device, 120v or 277v				
1IRC	lota 10w Remote				
1PRS	<b>1PRS</b> Bodine 7w Remote, Self Testing				
1PB	1PB Bodine 10w Integral				
1PRD	Bodine 10w Remote, Dual Flex				

- 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
  - attery & Emergency Ordering Examples

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

### Finish

Powder-coat white painted finish on exposed trim

W	White (white cord/white canopy)				
S	Metallic Silver (white 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
D	LMFC	Legrand Wattstopper DLM	LMFC-011	Digital Lighting Management (DLM)	Wired, two RJ45 ports	OL2, OL4	None
E	NLI	Enlighted IOT	CU-4E	Enlighted, Remote	Enlighted Cable	Any 0-10v	Not available with 347 volt
E	NLC	Enlighted Connected Lighting	CU-4E	Enlighted, Remote	Enlighted Cable	Any 0-10v	Not available with 347 volt

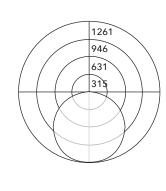
## **Photometrics**



Efficacy

Test # Scaled from ITL92432 Catalog # F24D-A-940HO 3605 lm Lumens Watts 41.3 W

87 LPW



Angle	
	0
0	1260
5	1261
10	1244
15	1217
20	1177
25	1126
30	1066
35	999
40	922
45	839
50	750
55	654
60	554
65	450
70	344
75	238
80	140
85	60
90	0

**Candela Distribution** 

Horizontal Angle

Vert

### Luminance Data (cd/sq.m)

Angle In	Average	Average	Average 90-Deg	
Degrees	0-Deg	45-Deg		
45	5122	5122	5122	
55	4921	4921	4921	
65	4597	4597	4597	
75	3975	3975	3975	
85	2991	2991	2991	

For all available IES files, please visit our website at pinnacle-itg.com. Photometry testing in accordance to IESNA-LM-79-08 at an NVLAP accredited testing laboratory. Testing conducted at 25°C ambient conditions

## **Approvals & Certifications**

Construction: Extruded aluminum housing is rolled and welded for seamless finish with minimal trim detail. Aluminum top cover conceals all electrical components. Highly reflective die-formed white painted steel reflector. Wiring access on top of housing.

Shielding: Single piece diffuse lens creating a fully luminous housing. Available with standard satine lens.

Mounting: Aircraft cable, Pendant, Surface and Wall mount available. Aircraft Cable and pendant supplied with 5" (127mm) canopies. Refer to installation instructions for appropriate ceiling detail. Maximum fixture weight is 25 lbs.

LED: 25°C test environment. Lumen output/wattage has a margin of +/- 5%. 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-ltg. com.

CRI, CCT & Output: Three lumen packages available. Low (LO), Mid (MO) and High (HO). Custom outputs are available. Specify custom lumens or watts between standard offering listed on CRI, CCT & Output page. 90 CRI is available for 2700K, 3000K, 3500K, and 4000K, 90 CRI = R9≥50,

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

Driver: Standard Driver Option is Advance 0-10V, 1% = FSD. 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 FINA configurations will not accommodate all driver options.

Circuiting: Select from Single circuit (1), Emergency circuit (E) or Night Light circuit (N). Some FINA 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 remote to fixture. For more Battery options, see Pinnacle Resource Guide on download pages at pinnacle-ltg.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 utlizes 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: UL and cUL 1598 listed. LO, MO, and HO lumen packages are IC Rated, approved for dry/damp location unless otherwise noted.

Fixture Weight: 25 lbs maximum

#### **Buy American Act compliant**

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