# PINNAL LIGHTING®

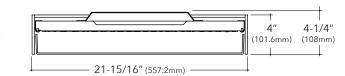
Project Name

Date

Туре



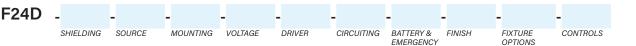
**FINA** F24D 24" Direct Suspended Architectual Round with Acoustic Solutions



#### **Key Features**

- 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
- Sound Absorption available in specific configurations
- 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
- Room-side maintenance for LED system
- Buy American Act compliant
- Apparent Noise Reduction Coefficient (NRC) is up to 1.9

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



			-
SHIELDING <sup>1</sup>	SOURCE <sup>2</sup>	MOUNTING <sup>3</sup>	VOLTAGE
<ul> <li>A - Flush Satine Lens</li> <li>AL - Drop Satine Lens</li> <li>AR - Regress Satine Lens</li> <li>ASF Acoustic Solution Flush</li> <li>(use A to specify color)</li> <li>ASR Acoustic Solution Regress</li> <li>(use A to specify color)</li> <li>Shielding pg. 2</li> </ul>	927 2700K 930 3000K 935 3500K 940 4000K CL Custom Lumens CW Custom Watts NA - Not Applicable (for specifying SA fixtures) Source pg. 3	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 NA - Not Applicable (for specifying SA fixtures) Voltage pg. 4

	-		
DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH
FSD - Factory Select Driver (1%, 0-10v) PL2 - Advance Xitanium (1%, 0-10v) EE1 - eldoLED ECOdrive (1%, 0-10v) ES1 - eldoLED SOLOdrive (0.1%, 0-10v) LH1 - Lutron Hi-lume (1%, EcoSystem) OL2 - eldoLED Optotronic (1%, 0-10v) OL4 - eldoLED Optotronic 347v (1%, 0-10v) NA - Not Applicable (for specifying SA fixtures) Driver pg. 4	······································	<ul> <li>0 - None</li> <li>1PB - Bodine 10W</li> <li>FSG - Factory Select ALCR</li> <li>GI - Iota ETS DR</li> <li>GB - Bodine GTD</li> <li>NA - Not Applicable (for specifying SA fixtures)</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	CONTROLS⁴
AM - Antimicrobial Paint GMF - Slow Blow Fusing DSP - Customer Supplied Battery/Driver/ Sensor NA - Not Applicable (for specifying SA fixtures) Fixture Options pg. 4	DLMFC - Wattstopper DLM (wired) ENLI - Enlighted IOT (remote) ENLC - Enlighted Connected Lighting (remote) NA - Not Applicable (for specifying SA fixtures) Controls pg. 5

"When specifying Sound Absorption (no lit components), use NA for the following sections of the part number: SOURCE, VOLTAGE, DRIVER, CIRCUITING, BATTERY & EMERGENCY, or CONTROLS. <sup>2</sup>When specifying SOURCE use the ending \_\_ are for specifying output, example **HO** - High Output. See output charts for more information. <sup>3</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>4</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.

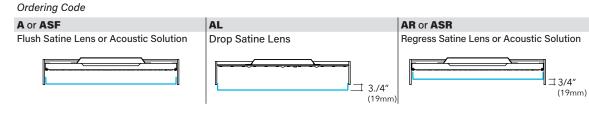
Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions.

# PINNA CLE

# FINA F24D Architectural Round

# Shielding

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



## **Acoustic Solutions**

12mm PET Polyester Fiber acoustic panel

- Specify the color of the Acoustic panel with the numeric code below in the Acoustic Finish portion of the part number. For example, specify **A08** for Nickel
- Recyclable and contains up-to 90% post-consumer content
   Colors below are for representation purposes, color may vary from photograph, contact factory for sample

<b>A01 -</b> Charcoal	A02 - Black	A03 - Azure	A04 -	Ruby AC	<b>)5 -</b> Commander	A06 - Coffee Bean
					*	
<b>407 -</b> Almond	A08 - Nickel	A09 - Stone	A10 - 5	Slate A1	<b>1 -</b> Pear	<b>A12 -</b> Teal
			1			
<b>A13 -</b> Warm White	A14 - Nighttime B	lue A15 - Tiger	A16 - 0	Cool Grey A1	<b>7 -</b> Grey Granite	<b>A18 -</b> Dune
					的现在形式的高	
<b>\19 -</b> Bone	A20 - Bumblebee	A21 - Gingerbread	A22 - Raven	A23 - Oregano	A24 - Mushroom	PCC - Custom Color
	Par Dambiebee			All oreguno	Mushroom	Please note there is a
				and the second second		minimum order quant for custom matching.
		Second Second				Consult factory for or quantity, price and lea



# Source: White LED

90 CRI = R9≥50

#### Sound Absorption NA Not applicable (for Sound Absorption fixtures)

# **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 tem
CW	Specify CRI, CCT and desired wattage (i.e. CW94020)	Specify watts between standard offering listed below

#### **90 CRI**

	Color	Shielding		
		A, AL, AR		
		Satine Lens	5	
		Lumens	Watts	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
940MO	4000K	2622	29.1	90
940HO	4000K	3605	41.3	87

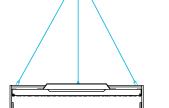
# Mounting

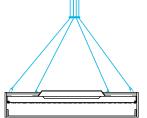
 Aircraft cables and pendants mount directly to a standard junction box or structure

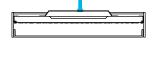
Canopies and pendants match fixture finish, power cords are white, grey, or black depending on fixture finish. See Finish section for additional details.

- Must specify overall pendant length of 12", 18" or 24" .
- Must specify cable length, either 48" or 120" standard, field adjustable Maximum fixture weight is 25 lbs

AC3\_\_JB AH4\_\_JB PP\_JB 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 PS JB Pendant Swivel to J-Box AC3\_\_ST AH4\_\_ST PP ST WA 4 AC cables with hub to fixture to Structure Surface Mount Wall 3 AC cables to fixture to Structure Pendant Pipe to Structure PS\_ST 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



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 FINA configurations will not accommodate all voltage options; consult with factory

U	Universal
1	120 volt
2	277 volt
3	347 volt
NA	Not Applicable (for Sound Absorption)

## 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-Itg com

at pinnacie-itg.com		
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	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)	
<b>Lutron Drivers</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	

# Circuiting

Select fixture circuiting from options below

	<ul> <li>Some FINA configurations will not accommodate all circuiting options; consult with factory</li> </ul>	
	1	Single Circuit
	E	Emergency Circuit only
	N	Night Light Circuit only
Ĩ	NA	Not Applicable (for Sound Absorption)

## **Battery & Emergency**

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

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

#### Finish

Powder-coat white painted finish on exposed trim

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

# **Fixture Options**

<ul> <li>Additional options to enhance the fixture and finish of the product</li> </ul>		
AM	Antimicrobial Paint	
GMF	Internal Slow Blow Fuse	

DSP	Customer Supplied Battery/Driver/Sensor			
NA	Not Applicable (for Sound Absorption)			

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

F24D\_SUSPENDED\_SPEC\_JULY2024

 Some FINA 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 <ul> <li>Multiply battery wattage X fixture LPW shown on Lumen Table</li> <li>10 (watts) x 92.3 (LPW) = 923 battery lumen output</li> </ul>				
Battery & Emergency Ordering Examples <ul> <li>Single circuit, 10w integral battery</li> <li>Emergency circuit only, 10w integral battery</li> </ul>	Ordering Code: 1-1PB Ordering Code: E-1PB			



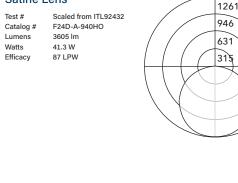
# Controls

- 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
- Controls can only be used with Single Circuit (1) or Emergency Circuit (E)
   Contact factory for any non-standard configurations for layout, placement, or
- integral sensors for individual fixture control EM options Pinnacle Lighting fixtures ship technology ready; comissioning by others 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
NA	Not Applicable (for Sound Absorption)					

#### **Photometrics**

#### Satine Lens



#### **Candela Distribution**

Vert Horizontal Angle

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				

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

Angle In	Average	Average	Average
Degrees	0-Deg	45-Deg	90-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-ltg.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.

Acoustic Solutions: Acoustic Solutions panels may be specified in place of lit fixture components to aid in Acoustic Control within a space. Acoustic Solutions material is a 9mm PET Polyester Fiber acoustic panel, containing up to 90% post-consumer content, made by others. Acoustic testing was completed by Riverbank Acoustic. For specific reports, contact Pinnacle directly.

**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-Itg. 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 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. 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.

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