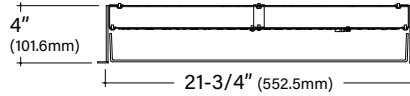


# FINA F24D

## 24" Direct Recessed Architectural Round



### Key Features

- Extruded aluminum housing is rolled and welded for seamless finish with 3/4" 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
- Room-side maintenance for LED system



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

**F24D** - **SHIELDING** - **SOURCE** - **MOUNTING** - **VOLTAGE** - **DRIVER** - **CIRCUITING** - **BATTERY & EMERGENCY** - **FINISH** - **FIXTURE OPTIONS** - **CONTROLS**

SHIELDING	SOURCE <sup>1</sup>	MOUNTING	VOLTAGE
<b>A</b> - Flush Satine Lens <b>AL</b> - Drop Satine Lens <b>AR</b> - Regress Satine Lens <i>Shielding pg. 2</i>	<b>927</b> _ _ - 2700K <b>930</b> _ _ - 3000K <b>935</b> _ _ - 3500K <b>940</b> _ _ - 4000K <b>CL</b> _ _ _ _ - Custom Lumens <b>CW</b> _ _ _ _ - Custom Watts <i>Source pg. 2</i>	<b>G</b> - Grid Ceiling <b>FL</b> - Flanged <b>NF</b> - Non-Flanged <b>SF</b> - Spackle Flange <i>Mounting pg. 3</i>	<b>U</b> - Universal (120 thru 277V) <b>1</b> - 120V <b>2</b> - 277V <b>3</b> - 347V <i>Voltage pg. 3</i>
DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH
<b>FSD</b> - Factory Select Driver (1%, 0-10v) <b>PL2</b> - Advance Xitanium (1%, 0-10v) <b>OL2</b> - eldoLED Optotronic (1%, 0-10v) <b>OL4</b> - eldoLED Optotronic 347v (1%, 0-10v) <b>EE1</b> - eldoLED ECOdrive (1%, 0-10v) <b>ES1</b> - eldoLED SOLOdrive (0.1%, 0-10v) <b>LH1</b> - Lutron Hi-lume (1%, EcoSystem) <i>Driver pg. 3</i>	<b>1</b> - Single Circuit <b>E</b> - Emergency ( <i>entire fixture</i> ) <b>N</b> - Night Light ( <i>entire fixture</i> ) <i>Circuiting pg. 4</i>	<b>0</b> - None <b>FSG</b> - Factory Select ALCR <b>GI</b> - Iota ETS DR <b>GB</b> - Bodine GTD <b>1ICL</b> - Iota 7W Integral <b>1PB</b> - Bodine 10W <b>1PCL</b> - Bodine 6W Integral <i>Battery and Emergency pg. 4</i>	<b>W</b> - White <i>Finish pg. 4</i>
FIXTURE OPTIONS <sup>2</sup>	CONTROLS <sup>3</sup>		
<b>CP</b> - Chicago Plenum <b>AM</b> - Antimicrobial Paint <b>FW6</b> - 6' Flex Whip <b>DSP</b> - Customer Supplied Battery/Driver/Sensor <b>GMF</b> - Slow Blow Fusing <b>BA</b> - Buy America(n) Act and/or Build America Buy America Compliant <i>Fixture Options pg. 4</i>	<b>DLMFC</b> - Wattstopper DLM ( <i>wired</i> ) <i>Controls pg. 4</i>		

<sup>1</sup>When specifying SOURCE use the ending \_ \_ are for specifying output, example **HO** - High Output. See output charts for more information. <sup>2</sup>Compliance is configuration dependent; consult factory for confirmation.  
<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.




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

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

### Ordering Code

A	AL	AR
Flush Satine Lens	Drop Satine Lens	Regress Satine Lens
		

## Source: White LED

- 90 CRI = R9≥50

## Custom Output- Lumens OR Wattage

<b>CL</b> _____	Specify CRI, CCT and desired lumens (i.e. CL8352000)	Specify lumens between standard offering listed below. Lumens are specified per color temp
<b>CW</b> _____	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		
		Lumens	Watts	LPW
<b>927LO</b>	2700K	1497	17.2	87
<b>927MO</b>	2700K	2526	29.2	86
<b>927HO</b>	2700K	3472	41.5	84
<b>930LO</b>	3000K	1508	17.1	88
<b>930MO</b>	3000K	2548	28.9	88
<b>930HO</b>	3000K	3504	41.0	86
<b>935LO</b>	3500K	1508	17.1	88
<b>935MO</b>	3500K	2548	28.9	88
<b>935HO</b>	3500K	3504	41.0	86
<b>940LO</b>	4000K	1551	17.2	90
<b>940MO</b>	4000K	2622	29.1	90
<b>940HO</b>	4000K	3605	41.3	87

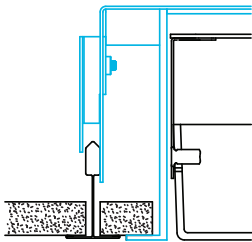


Mounting

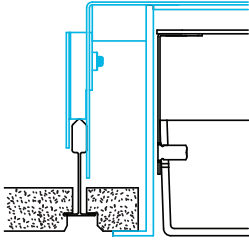
- Designed to install into acoustical grid and inaccessible ceilings
- Tie off fixture to structure with retention wires
- Maximum fixture weight is 25 lbs

G

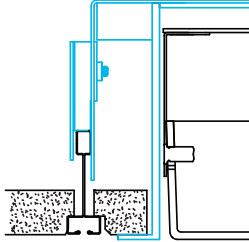
Grid Ceiling with 3/4" (19.1mm) Trim  
15/16" T-Bar



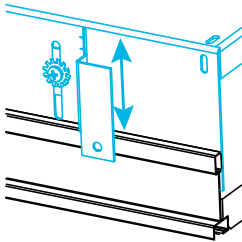
9/16" T-Bar



Screw Slot T-Bar

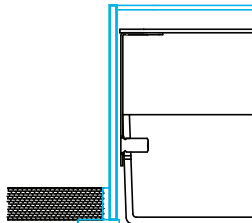


Recessed box allows for 1/2" of adjust-  
ability to accommodate a variety of  
grid ceilings



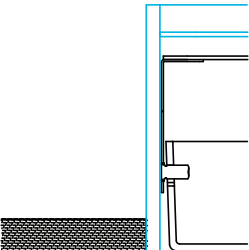
FL

Standard 3/4" (19.1mm) Flange  
Exposed Flange



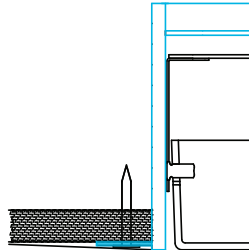
NF

Non-Flange with 1/4" (6.4mm) Trim  
Metal Pan or Millwork



SF

Spackle Flange  
Drywall, Flangeless



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 at pinnacle-ltg.com
- Some FINA configurations will not accommodate all driver options; consult with factory

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

DALI Drivers

EE3	eldoLED ECOdrive 1%, DALI 2, Logarithmic, DT6
ES3	eldoLED SOLOdrive 0.1%, DALI 2, Logarithmic, DT6

Lutron Drivers

LH1	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1
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## Circuiting

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

<b>1</b>	Single Circuit
<b>E</b>	Emergency Circuit only
<b>N</b>	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](http://pinnacle-ltg.com)

<b>0</b>	No Battery
<b>FSG</b>	Factory Select ALCR Emergency Control Device, UNV
<b>GI</b>	Iota ETS-DR, Emergency Control Device, UNV
<b>GB</b>	Bodine GTD, Emergency Control Device, 120v or 277v
<b>1ICL</b>	Iota 7w, Integral Lithium, Self Testing
<b>1PB</b>	Bodine 10w, Integral
<b>1PCL</b>	Bodine 6w, Integral Lithium, Self Testing

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

## Finish

- Powder-coat white painted finish on exposed trim

<b>W</b>	White
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## Fixture Options

- Additional options to enhance the fixture and finish of the product

<b>CP</b>	Chicago Plenum
<b>AM</b>	Antimicrobial Paint
<b>FW6</b>	Flex Whip 6'
<b>DSP</b>	Customer Supplied Battery/Driver/Sensor
<b>GMF</b>	Internal Slow Blow Fuse

- Domestic content option - compliance is configuration dependent; consult factory for conformation

<b>BA</b>	Buy America(n) Act and/or Build America Buy America Compliant
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## 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; commissioning 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 drop/sensor per run typical, contact factory for more information

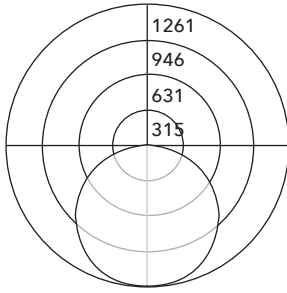
	Solution	Components	Network/Sensor	Connection	RQD Drivers	Limitation
<b>DLMFC</b>	Legrand Wattstopper DLM	LMFC-011	Digital Lighting Management (DLM)	Wired, two RJ45 ports	OL2, OL4	None



## Photometrics

### Satine Lens

Test # Scaled from ITL92432  
Catalog # F24D-A-940HO  
Lumens 3605 lm  
Watts 41.3 W  
Efficacy 87 LPW



### Candela Distribution

Vert Angle	Horizontal Angle
0	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 Degrees	Average 0-Deg	Average 45-Deg	Average 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](http://pinnacle-ltg.com). Photometry testing in accordance to IESNA-LM-79-08 at an NVLAP or IAS 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 both sides and top of housing.

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

**Mounting:** Designed to install into acoustical grid and inaccessible ceilings. Recessed, aircraft cable, pendant and surface mount available. For recessed, specify G for acoustical grid ceiling. Specify FL, NF, or SF for inaccessible ceilings. Tie off fixture to structure with retention wires.

**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. TM-21-21 Lifetime Rating L70 = >102,000 hours, L90 = 52,600 hours. MacAdam 3-Step Ellipses. For all available IES files, please visit our website at [pinnacle-ltg.com](http://pinnacle-ltg.com).

**CRI, CCT & Output:** Not all lumen packages available. Three lumen packages available. Low (LO), Medium (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) and 347 volt (3) options available. Must specify PL4 or OL4 in Driver section when 347 volt (3) is selected. Some configurations will not accommodate all voltage options; consult with factory.

**Driver:** Standard Driver Option is Factory Select Driver 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. Some 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](http://pinnacle-ltg.com).

**Finish:** Standard powder-coat textured white 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.

**Buy America Act (BAA) and Build America, Buy America Act (BABA) Compliance:** BAA and/or BABA compliance options are available to support federally funded projects requiring domestic content. Availability depends on configuration; Compliance is configuration-dependent; consult factory for confirmation.

**Labels:** UL and cUL 1598 listed. Standard and High output lumen packages are IC Rated for recessed fixtures and are approved for dry/damp location unless otherwise noted.

**Fixture Weight:** 25 lbs maximum

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