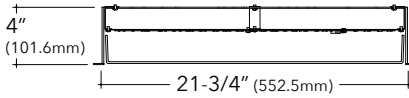


# FINA F24D

24" Direct Recessed Architectural Round with Sound Absorption

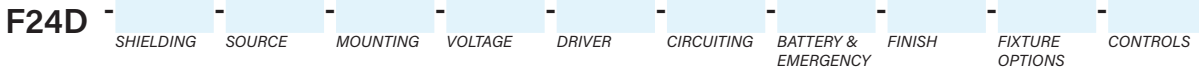


## Key Features

- 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
- 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-830HO-G-U-PL2-1-0-W



| SHIELDING <sup>1</sup>  | SOURCE <sup>2</sup>  | MOUNTING  | VOLTAGE   |
|---|--|---|---|
| <b>A</b> - Flush Satine Lens<br><b>AL</b> - Drop Satine Lens<br><b>AR</b> - Regress Satine Lens<br><b>ASF</b> - Acoustic Solution Flush<br><i>(use P__ to specify color)</i><br><b>ASR</b> - Acoustic Solution Regress<br><i>(use P__ to specify color)</i><br>Shielding pg. 2  | <b>27</b> - 2700K<br><b>30</b> - 3000K<br><b>35</b> - 3500K<br><b>40</b> - 4000K<br><b>CL</b> - Custom Lumens<br><b>CW</b> - Custom Watts<br><b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i><br>Source pg. 3                    | <b>G</b> - Grid Ceiling<br><b>FL</b> - Flanged<br><b>NF</b> - Non-Flanged<br><b>SF</b> - Spackle Flange<br>Mounting pg. 3   | <b>U</b> - Universal <i>(120 thru 277V)</i><br><b>1</b> - 120V<br><b>2</b> - 277V<br><b>3</b> - 347V<br><b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i><br>Voltage pg. 4 |
| DRIVER  | CIRCUITING   | BATTERY & EMERGENCY   | FINISH  |
| <b>PL2</b> - Advance Xitanium <i>(1%, 0-10v)</i><br><b>EE1</b> - eldoLED ECOdrive <i>(1%, 0-10v)</i><br><b>ES1</b> - eldoLED SOLOdrive <i>(0%, 0-10v)</i><br><b>LH1</b> - Lutron Hi-lume <i>(1%, EcoSystem)</i><br><b>OL2</b> - Osram Optotronic <i>(1%, 0-10v)</i><br><b>OL4</b> - Osram Optotronic 347v <i>(1%, 0-10v)</i><br><b>ND</b> - Non-Dimming<br><b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i><br>Driver pg. 4 | <b>1</b> - Single Circuit<br><b>E</b> - Emergency <i>(entire fixture)</i><br><b>N</b> - Night Light <i>(entire fixture)</i><br><b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i><br>Circuiting pg. 4                              | <b>0</b> - None<br><b>1G</b> - Bodine GTD<br><b>1PB</b> - Bodine 10W<br><b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i><br>Battery and Emergency pg. 4 | <b>W</b> - White<br>Finish pg. 4  |
| FIXTURE OPTIONS   | CONTROLS <sup>3</sup>  |   |   |
| <b>CP</b> - Chicago Plenum<br><b>AM</b> - Antimicrobial Paint<br><b>FW6</b> - 6' Flex Whip<br><b>GMF</b> - Slow Blow Fusing<br><b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i><br>Fixture Options pg. 4  | <b>DLMFC</b> - Wattstopper DLM <i>(wired)</i><br><b>ENLI</b> - Enlighted IOT <i>(remote)</i><br><b>ENLC</b> - Enlighted Connected Lighting <i>(remote)</i><br><b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i><br>Controls pg. 5 |   |   |

<sup>1</sup>When specifying a fixture with only 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 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>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

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

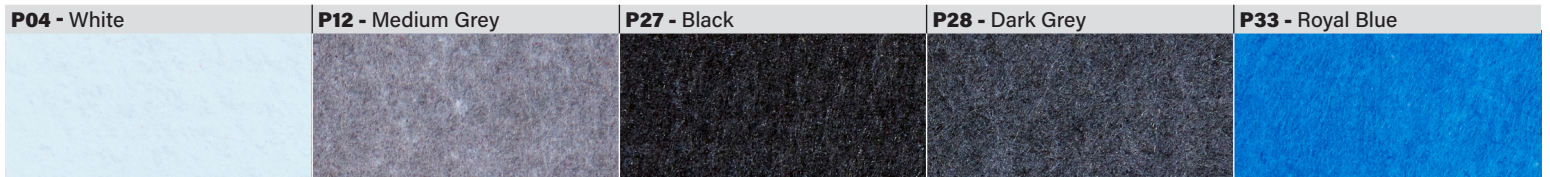
### Ordering Code

| <b>A or ASF</b>  | <b>AL</b>   | <b>AR or ASR</b>   |
|--|---|--|
| Flush Satine Lens or Acoustic Solution   | Drop Satine Lens  | Regress Satine Lens or Acoustic Solution   |
|  |  |  |

## Acoustic Solutions

- 9mm PET Polyester Fiber acoustic panel
- Recyclable and contains up-to 90% post-consumer content
- Use SAFP\_\_ or SARP\_\_ for direct panels
- Colors below are for representation purposes, color may vary from photograph, contact factory for sample.
- Specify the color of the Sound Absorption with the numeric code below in the Shielding portion of the part number. For example, SAF04 for Direct Sound Absorption, Flush Mounting, White 04

### Standard Colors



### Secondary Colors - May increase lead-time for order. Consult Factory.





**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

**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 temp

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

**80 CRI**

|              | Color | Shielding<br><b>A, AL, AR</b><br>Satine Lens |       |     |
|--------------|-------|--|-------|-----|
|              |       | Lumens                                       | Watts | LPW |
| <b>830LO</b> | 3000K | 1738   | 16.5  | 105 |
| <b>830MO</b> | 3000K | 2984   | 27.7  | 108 |
| <b>830HO</b> | 3000K | 4174   | 38.9  | 107 |
| <b>835LO</b> | 3500K | 1849   | 16.7  | 111 |
| <b>835MO</b> | 3500K | 3178   | 28.0  | 114 |
| <b>835HO</b> | 3500K | 4448   | 39.2  | 114 |
| <b>840LO</b> | 4000K | 1866   | 16.7  | 112 |
| <b>840MO</b> | 4000K | 3201   | 27.9  | 115 |
| <b>840HO</b> | 4000K | 4476   | 39.1  | 114 |

**90 CRI**

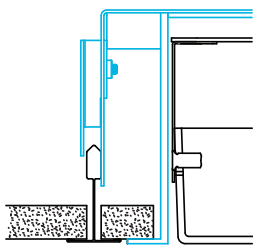
|              |       |      |      |    |
|--------------|-------|------|------|----|
| <b>927LO</b> | 2700K | 1497 | 17.2 | 87 |
| <b>927MO</b> | 2700K | 2526 | 29.2 | 86 |
| <b>927HO</b> | 2700K | 3472 | 41.5 | 84 |
| <b>930LO</b> | 3000K | 1508 | 17.1 | 88 |
| <b>930MO</b> | 3000K | 2548 | 28.9 | 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**

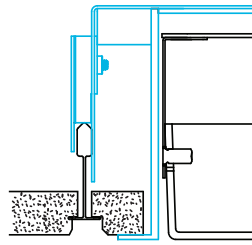
- Designed to install into acoustical grid and inaccessible ceilings
- Tie off fixture to structure with retention wires
- Maximum fixture weight is 25 lbs

**G**

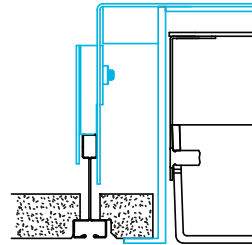
Grid Ceiling with 3/4" (19.1mm) Trim  
15/16" T-Bar



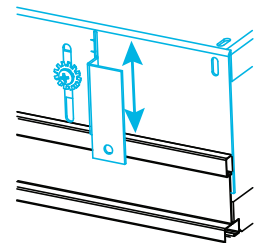
9/16" T-Bar



Screw Slot T-Bar

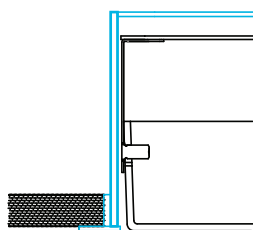


Recessed box allows for 1/2" of adjust-ability to accommodate a variety of grid ceilings



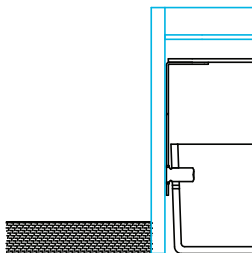
**FL**

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



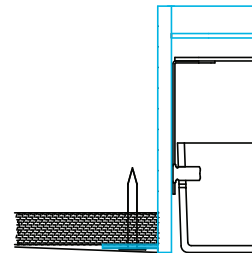
**NF**

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



**SF**

Spackle Flange  
Drywall, Flangeless



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.



## Voltage

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

|           |                                       |
|-----------|---------------------------------------|
| <b>U</b>  | Universal                             |
| <b>1</b>  | 120 volt                              |
| <b>2</b>  | 277 volt                              |
| <b>3</b>  | 347 volt                              |
| <b>NA</b> | Not Applicable (for Sound Absorption) |

## Driver

- Standard Driver Option = PL2
- 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

|            |   |
|------------|---|
| <b>PL2</b> | Philips Advance Xitanium 1%, 0-10v                        |
| <b>EE1</b> | eldoLED ECOdrive 1%, 0-10v Logarithmic                    |
| <b>ES1</b> | eldoLED SOLOdrive 0%, 0-10v Logarithmic                   |
| <b>LH1</b> | Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1 |
| <b>OL2</b> | Osram Optotronic 1%, 0-10v, nominal 1% dimming range      |
| <b>OL4</b> | Osram Optotronic 347v 1%, 0-10v, requires 347v option     |
| <b>ND</b>  | Non-Dimming   |
| <b>NA</b>  | Not Applicable (for Sound Absorption)                     |

## 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              |
| <b>NA</b> | 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
- For more Battery options, see Pinnacle Resource Guide on download pages at pinnacle-ltg.com

|            |                                       |
|------------|---------------------------------------|
| <b>0</b>   | No Battery                            |
| <b>1G</b>  | Bodine GTD, Generator Transfer Device |
| <b>1PB</b> | Bodine 10w Integral                   |
| <b>NA</b>  | Not Applicable (for Sound Absorption) |

### 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

## Finish

- Powder-coat white painted finish on exposed trim

|          |       |
|----------|-------|
| <b>W</b> | White |
|----------|-------|

## 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>GMF</b> | Internal Slow Blow Fuse               |
| <b>NA</b>  | 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\_RECESS\_SPEC\_JUNE2021





## Controls

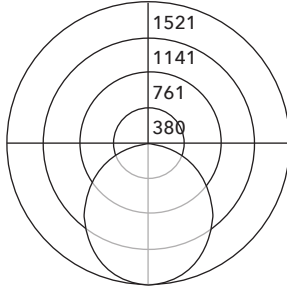
- Pinnacle Lighting offers easy to specify network control solutions that connect to an intelligent centralized system to maximize lighting energy efficiencies or integral sensors for individual fixture control
- Pinnacle Lighting fixtures ship technology ready; commissioning by others
- Controls can 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 sensor per housing 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 | Any 0-10v   | None                        |
| <b>ENLI</b>  | Enlighted IOT                         | CU-4E      | Enlighted, Remote                 | Enlighted Cable       | Any 0-10v   | Not available with 347 volt |
| <b>ENLC</b>  | Enlighted Connected Lighting          | CU-4E      | Enlighted, Remote                 | Enlighted Cable       | Any 0-10v   | Not available with 347 volt |
| <b>NA</b>    | Not Applicable (for Sound Absorption) |            |                                   |                       |             |                             |

## Photometrics

### Satine Lens

Test # ITL92433  
 Catalog # F24D-AL-840HO  
 Lumens 4623 lm  
 Watts 39.1 W  
 Efficacy 118 LPW



### Candela Distribution

| Vert Angle | Horizontal Angle |
|------------|------------------|
| 0          | 1520             |
| 5          | 1521             |
| 10         | 1505             |
| 15         | 1472             |
| 20         | 1426             |
| 25         | 1367             |
| 30         | 1298             |
| 35         | 1219             |
| 40         | 1131             |
| 45         | 1035             |
| 50         | 931              |
| 55         | 819              |
| 60         | 701              |
| 65         | 579              |
| 70         | 453              |
| 75         | 328              |
| 80         | 211              |
| 85         | 115              |
| 90         | 45               |
| 95         | 38               |
| 100        | 31               |
| 105        | 25               |
| 110        | 20               |
| 115        | 15               |
| 120        | 10               |
| 125        | 7                |
| 130        | 3                |
| 135        | 1                |
| 140        | 0                |

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

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|------------------|---------------|----------------|----------------|
| 45               | 6260          | 6260           | 6260           |
| 55               | 5995          | 5995           | 5995           |
| 65               | 5581          | 5581           | 5581           |
| 75               | 4844          | 4844           | 4844           |
| 85               | 3882          | 3882           | 3882           |

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 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.

**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:** 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. Maximum fixture weight is 25 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-ltg.com](http://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. 80 CRI is available for 3000K, 3500K, and 4000K. 90 CRI is available for 2700K, 3000K, 3500K, and 4000K. 80 CRI = R9≥19 and 90 CRI = R9≥61.

**Voltage:** Universal (U), 120 volt (1), 277 volt (2), 347 volt (3) options available. Some FINA 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](http://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](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. 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. 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

**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](http://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](http://pinnacle-ltg.com) | O: 303-322-5570 F: 303-322-5568

F24D\_RECESS\_SPEC\_JUNE2021