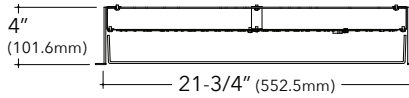


FINA F24D

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

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

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

¹When 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.
²When 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. ³Controls 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.




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Shielding

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

Ordering Code

A or ASF	AL	AR or ASR
Flush Satine Lens or Acoustic Solution	Drop Satine Lens	Regress Satine Lens or Acoustic Solution
		

Acoustic Solutions

- 12mm 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

A01 - Charcoal	A02 - Black	A03 - Azure	A04 - Ruby	A05 - Commander	A06 - Coffee Bean
					
A07 - Almond	A08 - Nickel	A09 - Stone	A10 - Slate	A11 - Pear	A12 - Teal
					
A13 - Warm White	A14 - Nighttime Blue	A15 - Tiger	A16 - Cool Grey	A17 - Grey Granite	A18 - Dune
					
A19 - Bone	A20 - Bumblebee	A21 - Gingerbread	A22 - Raven	A23 - Oregano	A24 - Mushroom
					
PCC - Custom Color Please note there is a minimum order quantity for custom matching. Consult factory for order quantity, price and lead-time.					



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

90 CRI

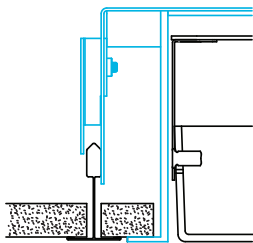
927LO	2700K	1497	17.2	87
927MO	2700K	2526	29.2	86
927HO	2700K	3472	41.5	84
930LO	3000K	1508	17.1	88
930MO	3000K	2548	28.9	88
930HO	3000K	3504	41.0	86
935LO	3500K	1508	17.1	88
935MO	3500K	2548	28.9	88
935HO	3500K	3504	41.0	86
940LO	4000K	1551	17.2	90
940MO	4000K	2622	29.1	90
940HO	4000K	3605	41.3	87

Mounting

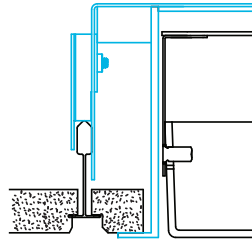
- Designed to install into acoustical grid and inaccessible ceilings
- Tie off fixture to structure with retention wires
- Maximum fixture weight is 25 lbs

G

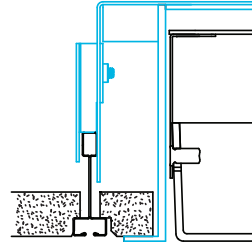
Grid Ceiling with 3/4" (19.1mm) Trim
15/16" T-Bar



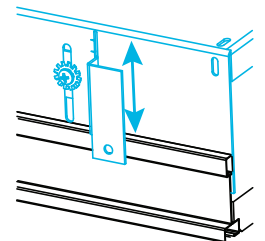
9/16" T-Bar



Screw Slot T-Bar

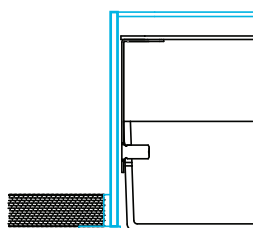


Recessed box allows for 1/2" of adjust-
ability to accommodate a variety of
grid ceilings



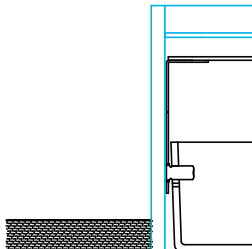
FL

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



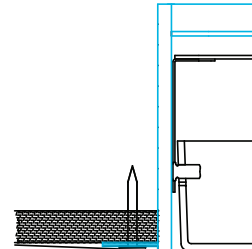
NF

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



SF

Spackle Flange
Drywall, Flangeless



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

0-10V Drivers

FSD	Factory Select Driver 1%, 0-10v
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

DALI Drivers

EE3	eldoLED SOLOdrive .1%, DALI (logarithmic)
EE4	eldoLED SOLOdrive .1%, DALI (linear)

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

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
N	Night Light Circuit only
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
- For more Battery options, see Pinnacle Resource Guide on download pages at pinnacle-ltg.com

0	No Battery
1IRC	Iota 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)
GI	Emergency Transfer Switch (ETS) DR Emergency Control Device
GB	Bodine GTD, Generator Transfer Device

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

Finish

- Powder-coat white painted finish on exposed trim

W	White
----------	-------

Fixture Options

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

CP	Chicago Plenum
AM	Antimicrobial Paint
FW6	Flex Whip 6'
GMF	Internal Slow Blow Fuse
NA	Not Applicable (for Sound Absorption)

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Controls

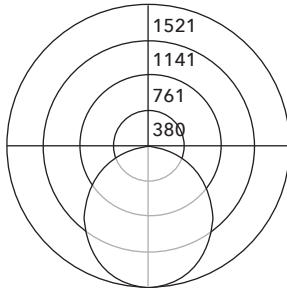
- Pinnacle Lighting offers easy to specify network control solutions that connect to an intelligent centralized system to maximize lighting energy efficiencies or integral sensors for individual fixture control
- Pinnacle Lighting fixtures ship technology ready; commissioning by others
- Controls can 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 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

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

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. 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.

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. 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 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.

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