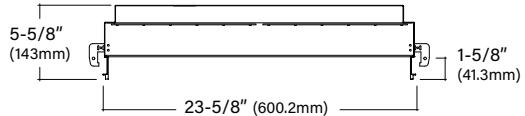


LiFT LF24

2x4 Direct Recessed Architectural Square



Key Features

- Formed 20 gauge cold rolled steel housing
- Highly reflective die-formed white painted reflector
- Fabricated, captive lens with 3 lens positions
- LiFT 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 #: LF24-AR-930HO-G-U-FSD-1-0-W

LF24	- AR	-	-	-	-	-	-	-	-	-	-
SHIELDING	CRI, CCT & OUTPUT	MOUNTING	VOLTAGE	DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH	Fixture Options	CONTROLS		

AR	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
SHIELDING	SOURCE^{1,2}			MOUNTING			VOLTAGE³				
AR - Regressed Satine Lens	927 - 90 CRI, 2700K 930 - 90 CRI, 3000K 935 - 90 CRI, 3500K 940 - 90CRI, 4000K TW - 2CH Tunable White (2700-6500K, 90CRI) CL - Custom Lumens CW - Custom Watts Source pg. 2	G - Grid Ceiling FL - Flanged SF - Spackle Flange Mounting pg. 2	U - Universal (120 thru 277V) 1 - 120V 2 - 277V 3 - 347V Voltage pg. 3								

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DRIVER	CIRCUITING⁴			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) PS1 - Advance Xitanium (50%/100%) Driver pg. 3	1 - Single Circuit E - Emergency (entire fixture) Circuiting pg. 3	0 - None FSB - Factory Select Battery FSG - Factory Select ALCR GI - Iota ETS DR GB - Bodine GTD IILL - Iota 10W, Integral 1PLL - Bodine 10W Integral Battery and Emergency pg. 4	W - White Finish pg. 4								

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CP - Chicago Plenum AM - Antimicrobial Paint FW6 - 6' Flex Whip DSP - Customer Supplied Battery/Driver/ Sensor GMF - Slow Blow Fusing BA - Buy America(n) Act and/or Build America Buy America Compliant Fixture Options pg. 4	MOD - Mod options available Controls pg. 4	

¹When specifying SOURCE the ending **_** are for specifying output, example **HO** - High Output. See output charts for more information. ²When specifying Tunable White, use **TW** and then specify output, example **TWHO** - Tunable White 90CRI, High Output 2700-6500K. See output charts for more information. Tunable White option requires driver option **FSD** which provides separate 0-10v control leads for Intensity and CCT.

³Tunable White (TW) option only available with Universal (U), 120V (1) or 277V (2) options. ⁴Consult factory for Emergency (E) options with Tunable White (TW) option. ⁵Compliance is configuration dependent; consult factory for confirmation.

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.



Source

- 90 CRI = R9≥50
- Longer lead-time may apply for Tunable White option. Consult factory
- Tunable White option requires driver option FSD which provides separate 0-10v

- control leads for Intensity and CCT.
- Tunable White lumen packages shown at 4000K CCT setpoint

Custom Output- Lumens OR Wattage

CL	Specify CCT and desired lumens (i.e. CL9352000)	Specify lumens between standard offering listed below. Lumens are specified per color temp
CW	Specify CCT and desired wattage (i.e. CW94020)	Specify watts between standard offering listed below
CLTW	Specify desired lumens for Tunable White (i.e. CLTW3200)	Specify lumens between Tunable White offering listed below. Lumens are specified at 4000K CCT setpoint.

90 CRI

Model	Color	Lumens	Shielding	
			AR	Satine Lens
927LO	2700K	4902	38.2	128
		7969	65.4	122
		10903	95.5	114
930LO	3000K	5128	38.2	134
930MO		8324	65.3	127
930HO		11396	95.5	119
935LO	3500K	5023	38.1	132
935MO		8150	65.0	125
935HO		11221	95.8	117
940LO	4000K	5189	38.0	137
940MO		8417	64.8	130
940HO		11607	95.5	122

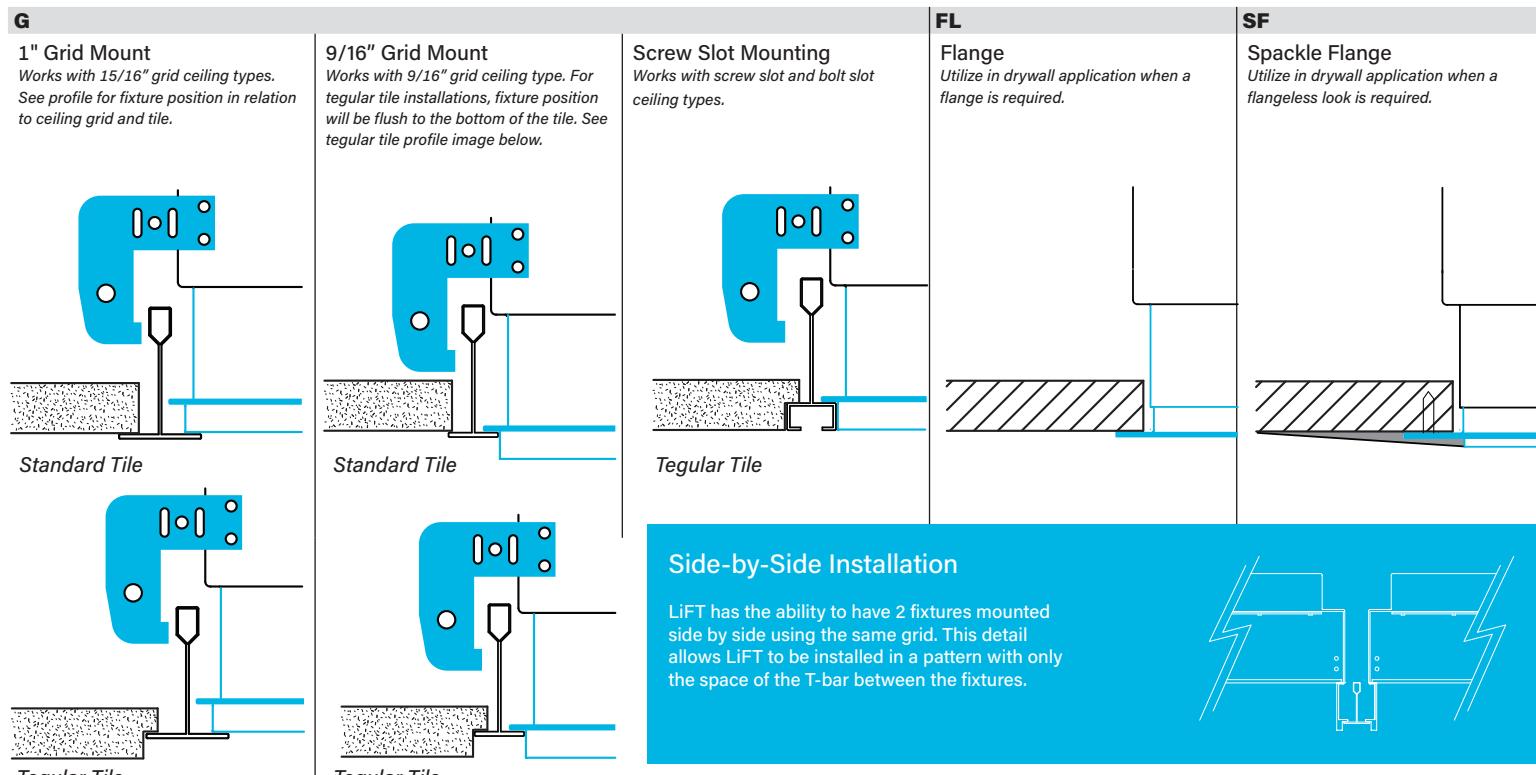
2 CH Tunable White (2700-6500K, 90CRI)

TWLO	2700 -	4900	39.4	124
TWMO	6500K	8200	70.7	116
TWHO		10800	96.1	112

Mounting

- Designed to install into acoustical grid and inaccessible ceilings
- Grid retention clips integral to housing and require mechanical attachment
- Tie off fixture to structure with retention wires

- Maximum fixture weight is 16 lbs
- Refer to installation instructions during installation at the job site
- Approved for dry/damp location unless otherwise noted



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Voltage

- Some LiFT configurations will not accommodate all voltage options; consult with factory
- 347 volt not available with Tunable White (TW) option

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 LiFT 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
PL4	Advance Xitanium 347v 1%, 0-10v, requires 347v
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
OD1	eldoLED Optotronic 1%, DEXAL

Lutron Drivers

LH1	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1
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Alternate Drivers

PS1	Advance Xitanium Step Dimming 50%/100%
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Circuiting

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

1	Single Circuit
E	Emergency Circuit only



Battery & Emergency

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

0	No Battery
FSB	Factory Select Battery (10w option)
FSBST	Factory Select Battery (10w, Self Testing)
FSG	Factory Select ALCR Emergency Control Device, UNV
GI	Iota ETS-DR, Emergency Control Device, UNV
GB	Bodine GTD, Emergency Control Device, 120v or 277v
1ILL	Iota 10w, Integral Lithium, Self Testing
1PLL	Bodine 10w, Integral Lithium, Self Testing

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

For Approximate Battery Lumen Output

- Multiply battery wattage X fixture LPW shown on Lumen Table
- $10 \text{ (watts)} \times 128 \text{ (LPW)} = 1,280 \text{ battery lumen output}$

Battery & Emergency Ordering Examples

▪ Single circuit, 10w integral battery	Ordering Code: 1-1FSB
▪ Emergency circuit only, 10w integral battery	Ordering Code: E-1PLL

Finish

- Powder-coat white painted finish on exposed trim
- Selecting a fixture finish other than white may impact lumen output; consult factory for more information

W	White
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Fixture Options

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

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

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

BA	Buy America(n) Act and/or Build America Buy America Compliant
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Controls

- Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.

Controls: MOD Options

- Specify **MOD** in the part number for any of the below options
- **Control** Options may require specific driver. Refer to the chart below
- Consult factory for **MOD** specification details, pricing, and lead-time information

MOD	Lutron Athena Connected
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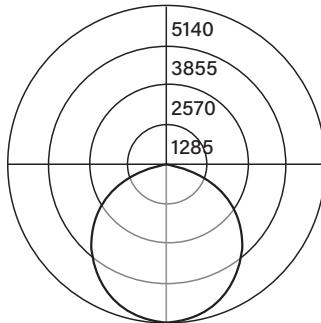
Ordering Code AWNR	Required Driver OD1, PR1, OL5, PL5
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Photometrics

Satine Lens

Test # KPL2015-111
Catalog # LF24-AR-940HO
Lumens 14180 lm
Watts 117 watts
Efficacy 121 LPW



Candela Distribution

Vert Angle	Horizontal Angle	0	22.5	45	67.5	90
0	5116	5116	5116	5116	5116	
5	5058	5070	5092	5111	5119	
10	4983	4994	5011	5024	5029	
15	4866	4870	4876	4889	4895	
20	4707	4704	4702	4713	4718	
25	4510	4498	4490	4497	4503	
30	4273	4253	4241	4245	4251	
35	4002	3975	3957	3959	3965	
40	3696	3665	3644	3642	3650	
45	3363	3326	3302	3297	3306	
50	3001	2962	2934	2927	2936	
55	2615	2575	2545	2537	2544	
60	2208	2169	2135	2125	2131	
65	1784	1745	1715	1704	1710	
70	1352	1316	1287	1280	1284	
75	925	898	874	867	871	
80	533	514	498	494	499	
85	220	205	195	186	186	
90	8	8	8	7	9	

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6817	6693	6702
55	6536	6359	6358
65	6052	5816	5799
75	5123	4839	4824
85	3611	3203	3066

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 or IAS accredited testing laboratory. Testing conducted at 25°C ambient conditions

Approvals & Certifications

Construction: Formed 20 gauge cold rolled steel housing. Highly reflective die-formed white painted reflector. Wiring access available on top of housing. Lens is removable for room-side maintenance of lens, driver and LED boards.

Shielding: Single piece extruded diffuse acrylic lens creating a fully luminous fixture.

Mounting: Designed to install into acoustical grid and inaccessible ceilings. Specify G for acoustical grid ceiling. Specify FL or SF for inaccessible ceilings. Grid retention clips integral to housing and require mechanical attachment. Tie off fixture to structure with retention wires.

White LED: 25°C test environment. Lumen output/wattage has a margin of +/- 5%. Lumenaire 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 = >60,000 hours, L90 = 52,600 hours. MacAdams 3-Step Ellipses. For all available IES files, please visit our website at pinnacle-ltg.com.

Tunable White LED: 2 channel solution with 2700K and 6500K LED, 90CRI only, R9 >50. Lumen packages available shown at 4000K CCT setpoint, lumen output varies based on CCT. Use multipliers for other CCT; 2700K = .91 3000K = .93 3500K = .97 4000K = 1.0 5000K = 1.044 6500K = 1.078.

Color & Lumen 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. Ambient operating range: -20°F/-30°C to 87°F/26C. For more driver options, see Pinnacle Resource Guide. Some configurations will not accommodate all driver options.

Circuiting: Select from single circuit (1) or Emergency circuit (E). Some LiFT 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 integral to fixture. For more Battery options, see Pinnacle Resource Guide on download pages at pinnacle-ltg.com.

Finish: Powder-coat white painted finish on exposed trim.

Controls: Mod options available, consult with factory.

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. LO, MO, and HO lumen packages are IC Rated, approved for dry/damp location unless otherwise noted.

Fixture Weight: 45 lbs maximum.

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