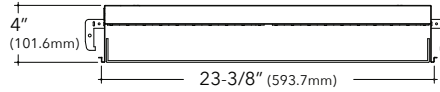


\*Shown with SARI2 option



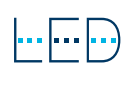
# LiFT LF22D

2x2 Direct Recessed Architectural Square  
with Sound Absorption



## Key Features

- Formed 20 gauge cold rolled steel housing
- Highly reflective die-formed white painted reflector
- Fabricated, captive lens with 3 lens positions
- Sound Absorption available in specific configurations
- 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
- Maximum fixture weight is 25 lbs
- Room-Side Maintenance for LED system
- Buy American Act compliant
- Apparent Noise Reduction Coefficient (NRC) is up to 1.7



Example Part #: LF22D-A-830HO-G-U-PL2-1-0-W

**LF22D** - SHIELDING - CRI, CCT & OUTPUT - MOUNTING - VOLTAGE - DRIVER - CIRCUITING - BATTERY & EMERGENCY - FINISH - FIXTURE OPTIONS - CONTROLS

SHIELDING <sup>1</sup>	SOURCE <sup>2</sup>	MOUNTING	VOLTAGE
<b>A</b> - Satine Lens <b>AR</b> - Regress Satine Lens <b>AL</b> - Drop Satine Lens <b>ASF</b> - Acoustic Solution Flush <i>(use A__ to specify color)</i> <b>ASR</b> - Acoustic Solution Regress <i>(use A__ to specify color)</i> <i>Shielding pg. 2</i>	<b>_27_</b> - 2700K <b>_30_</b> - 3000K <b>_35_</b> - 3500K <b>_40_</b> - 4000K <b>CL</b> - Custom Lumens <b>CW</b> - Custom Watts <b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i> <i>Source pg. 3</i>	<b>G</b> - Grid Ceiling <b>FL</b> - Flanged <b>SF</b> - Spackle Flange <i>Mounting pg. 4</i>	<b>U</b> - Universal <i>(120 thru 277V)</i> <b>1</b> - 120V <b>2</b> - 277V <b>3</b> - 347V <b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i> <i>Voltage pg. 4</i>
DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH
<b>FSD</b> - Factory Select Driver <i>(1%, 0-10v)</i> <b>PL2</b> - Advance Xitanium <i>(1%, 0-10v)</i> <b>OL2</b> - Osram Optotronic <i>(1%, 0-10v)</i> <b>OL4</b> - Osram Optotronic 347v <i>(1%, 0-10v)</i> <b>EE1</b> - eldoLED ECODrive <i>(1%, 0-10v)</i> <b>ES1</b> - eldoLED SOLOdrive <i>(0.1%, 0-10v)</i> <b>LH1</b> - Lutron Hi-lume <i>(1%, EcoSystem)</i> <b>PS1</b> - Advance Xitanium <i>(50%/100%)</i> <b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i> <i>Driver pg. 5</i>	<b>1</b> - Single Circuit <b>E</b> - Emergency <i>(entire fixture)</i> <b>N</b> - Night Light <i>(entire fixture)</i> <b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i> <i>Circuiting pg. 5</i>	<b>0</b> - None <b>FSG</b> - Factory Select ALCR <b>GI</b> - Iota ETS DR <b>GB</b> - Bodine GTD <b>1IC</b> - Iota 10W, Integral <i>(CEC Listed)</i> <b>1P</b> - Bodine 10W Integral <b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i> <i>Battery and Emergency pg. 5</i>	<b>W</b> - White <b>S</b> - Metallic Silver <b>BL</b> - Textured Black <b>BR</b> - Bronze <b>GR</b> - Graphite <b>CC</b> - Custom Color <i>Finish pg. 6</i>
FIXTURE OPTIONS	CONTROLS <sup>3</sup>		
<b>CP</b> - Chicago Plenum <b>AM</b> - Antimicrobial Paint <b>FW6</b> - 6' Flex Whip <b>GMF</b> - Slow Blow Fusing <b>DSP</b> - Customer Supplied Battery/Driver/Sensor <b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i> <i>Fixture Options pg. 6</i>	<b>DLMFC</b> - Wattstopper DLM <i>(wired)</i> <b>ENLI</b> - Enlighted IOT <i>(remote)</i> <b>ENLC</b> - Enlighted Connected Lighting <i>(remote)</i> <b>NA</b> - Not Applicable <i>(for specifying SA fixtures)</i> <i>Controls pg. 6</i>		

<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.

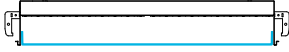
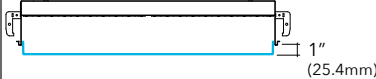
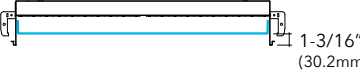
Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions.



## Shielding

- Fabricated, captive lens with 3 lens positions
- Highly reflective white reflectors maintain uniform lens brightness

### 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

- 12mm PET Polyester Fiber acoustic panel
- Recyclable and contains up-to 90% post-consumer content
- Colors below are for representation purposes, color may vary from photograph, contact factory for sample
- 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

<b>A01</b> - Charcoal	<b>A02</b> - Black	<b>A03</b> - Azure	<b>A04</b> - Ruby	<b>A05</b> - Commander	<b>A06</b> - Coffee Bean
					
<b>A07</b> - Almond	<b>A08</b> - Nickel	<b>A09</b> - Stone	<b>A10</b> - Slate	<b>A11</b> - Pear	<b>A12</b> - Teal
					
<b>A13</b> - Warm White	<b>A14</b> - Nighttime Blue	<b>A15</b> - Tiger	<b>A16</b> - Cool Grey	<b>A17</b> - Grey Granite	<b>A18</b> - Dune
					
<b>A19</b> - Bone	<b>A20</b> - Bumblebee	<b>A21</b> - Gingerbread	<b>A22</b> - Raven	<b>A23</b> - Oregano	<b>A24</b> - Mushroom
					
<b>PCC</b> - 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
- 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 temp

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

### 80 CRI

	Color	Lumens	Shielding A, AL, AR Satine Lens Watts	LPW
<b>830LO</b>	3000K	2414	20.0	121
<b>830MO</b>	3000K	3886	31.9	122
<b>830HO</b>	3000K	5317	45.3	117
<b>835LO</b>	3500K	2500	20.0	125
<b>835MO</b>	3500K	4074	31.9	128
<b>835HO</b>	3500K	5648	45.3	125
<b>840LO</b>	4000K	2619	20.1	130
<b>840MO</b>	4000K	4224	32.1	132
<b>840HO</b>	4000K	5816	45.7	127

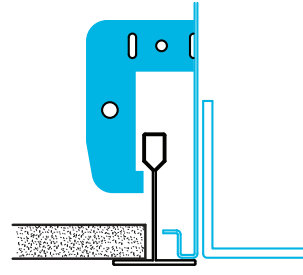
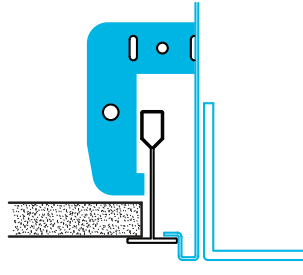
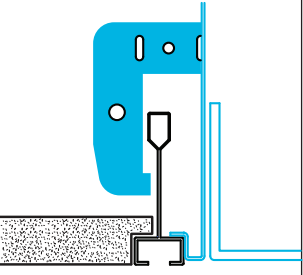
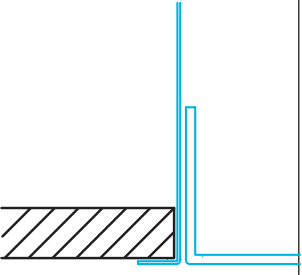
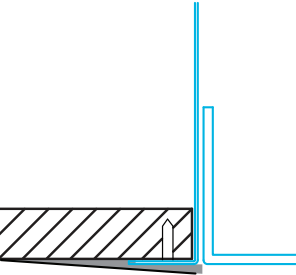
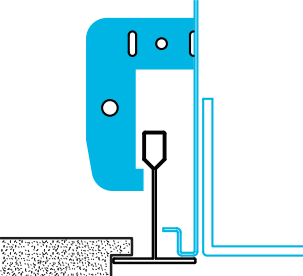
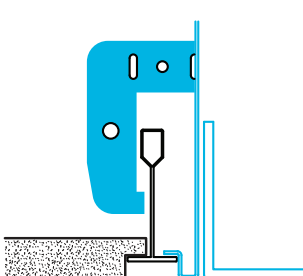
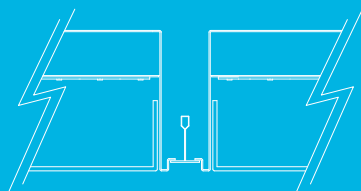
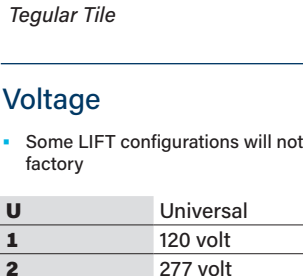
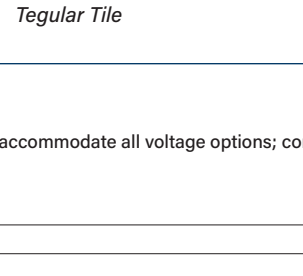
### 90 CRI

<b>927LO</b>	2700K	1960	20.1	98
<b>927MO</b>	2700K	3160	32.0	99
<b>927HO</b>	2700K	4338	45.5	95
<b>930LO</b>	3000K	2090	20.1	104
<b>930MO</b>	3000K	3374	32.0	105
<b>930HO</b>	3000K	4640	45.5	102
<b>935LO</b>	3500K	2090	20.1	104
<b>935MO</b>	3500K	3374	32.0	105
<b>935HO</b>	3500K	4640	45.5	102
<b>940LO</b>	4000K	2201	20.0	110
<b>940MO</b>	4000K	3544	32.0	111
<b>940HO</b>	4000K	4860	45.6	107



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 25 lbs
- Refer to installation instructions during installation at the job site
- Approved for dry/damp location unless otherwise noted

G			FL	SF	
<b>1" Grid Mount</b> <i>Works with 15/16" grid ceiling types. See profile for fixture position in relation to ceiling grid and tile.</i>		<b>9/16" Grid Mount</b> <i>Works with 9/16" grid ceiling type. For tegular tile installations, fixture position will be flush to the bottom of the tile. See tegular tile profile image below.</i>	<b>Screw Slot Mounting</b> <i>Works with screw slot and bolt slot ceiling types.</i>	<b>Flange</b> <i>Utilize in drywall application when a flange is required.</i>	<b>Spackle Flange</b> <i>Utilize in drywall application when a flangeless look is required.</i>
					
			<div>Side-by-Side Installation</div> <p>LiFT has the ability to have 2 fixtures mounted side by side using the same grid. This detail allows LiFT to be installed in a pattern with only the space of the T-bar between the fixtures.</p> 		
					

Voltage

- Some LiFT 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 LIFT configurations will not accommodate all driver options; consult with factory

### 0-10V Drivers

<b>FSD</b>	Factory Select Driver 1%, 0-10v
<b>PL2</b>	Advance Xitanium 1%, 0-10v
<b>PL4</b>	Advance Xitanium 347v 1%, 0-10v, requires 347v
<b>OL2</b>	Osram Optotronic, 1%, 0-10v
<b>OL4</b>	Osram Optotronic 347v, 1% 0-10v, requires 347v option
<b>EE1</b>	eldoLED ECOdrive 1%, 0-10v Logarithmic
<b>EE2</b>	eldoLED ECOdrive 1%, 0-10v Linear
<b>ES1</b>	eldoLED SOLOdrive 0-10v, 0.1% Logarithmic
<b>ES2</b>	eldoLED SOLOdrive 0-10v, 0% Linear

### DALI Drivers

<b>EE3</b>	eldoLED ECOdrive .1%, DALI (logarithmic)
<b>ES3</b>	eldoLED SOLOdrive .1%, DALI (logarithmic)
<b>OD1</b>	Osram Optotronic 1%, DEXAL
<b>OD2</b>	Osram Optotronic 1%, DALI 2 Channel

### Lutron Drivers

<b>LH1</b>	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1
<b>LH4</b>	Lutron Hi-Lume 1%, 2-wire, Lutron-LTEA2W, 120v only

### Alternate Drivers

<b>PS1</b>	Signify Advance Xitanium Step Dimming 50%/100%
<b>OD1</b>	Osram Optotronic 1%, DEXAL

## Circuiting

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

<b>1</b>	Single Circuit
<b>E</b>	Emergency Circuit only (uses nIO EZ PH ER with NLIGHT)
<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 integral to fixture

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

<b>0</b>	No Battery
<b>FSG</b>	Factory Select Automatic Load Control Relay (ALCR), UNV
<b>GI</b>	Emergency Transfer Switch (ETS) DR Emergency Control Device, UNV
<b>GB</b>	Bodine GTD, Generator Transfer Device, 120v or 277v
<b>1IC</b>	Iota 10w Integral
<b>1ILL</b>	Iota 10w Integral Lithium, Self Testing
<b>1IRH</b>	Iota 20w Remote
<b>1P</b>	Bodine 10w Integral
<b>1PRH</b>	Bodine 20w Remote
<b>1PLL</b>	Bodine 10w 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: 1-1P
- Emergency circuit only, 10w integral battery      Ordering Code: E-1P



## 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

<b>W</b>	White ( <i>white cord/white canopy</i> )
<b>S</b>	Metallic Silver ( <i>grey cord/silver canopy</i> )
<b>BL</b>	Textured Black ( <i>black cord/black canopy</i> )
<b>BR</b>	Bronze ( <i>white cord/bronze canopy</i> )
<b>GR</b>	Graphite ( <i>white cord/graphite canopy</i> )
<b>CC</b>	Custom Color ( <i>white cord/color match canopy</i> )

## 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>DSP</b>	Customer Supplied Battery/Driver/Sensor
<b>NA</b>	Not Applicable ( <i>for Sound Absorption</i> )

## 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	OL2, OL4	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 ( <i>for Sound Absorption</i> )					

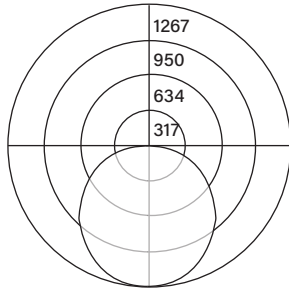




## Photometrics

### Satine Lens

Test # ITL92842  
Catalog # LF22D-A-840HO  
Lumens 5902 lm  
Watts 45.4 W  
Efficacy 130 LPW



### Candela Distribution

Vert Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	2041	2041	2041	2041	2041
5	2031	2030	2030	2029	2031
10	2004	2003	2004	2003	2003
15	1958	1958	1958	1957	1957
20	1895	1895	1895	1894	1894
25	1816	1816	1814	1815	1814
30	1723	1722	1720	1720	1719
35	1612	1610	1611	1608	1610
40	1491	1488	1489	1487	1488
45	1357	1355	1356	1354	1355
50	1215	1213	1213	1211	1213
55	1064	1063	1061	1061	1063
60	908	906	905	904	903
65	747	745	745	744	745
70	584	584	582	582	580
75	423	423	422	422	423
80	268	269	267	268	267
85	122	122	121	121	121
90	0	0	0	0	0

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5679	5675	5671
55	5490	5474	5485
65	5231	5217	5217
75	4837	4825	4837
85	4143	4109	4109

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:** 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 fabricated diffuse acrylic lens creating a fully luminous fixture.

**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 Acoustical Laboratories. For specific reports, contact Pinnacle directly.

**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. 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 = 145,500 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).

**Color & Lumen Output:** Three lumen packages available. Low (LO), Middle (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. 90 CRI = R9≥50.

**Voltage:** Universal (U), 120 volt (1), 277 volt (2) and 347 volt (3) options available. Must specify OL4 in Driver section when 347 volt (3) is selected. Some LiFT 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 LiFT configurations will not accommodate all driver options.

**Circuiting:** Select from single circuit (1), Emergency circuit (E) or Night Light circuit (N). 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](http://pinnacle-ltg.com).

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

**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:** UL and cUL 1598 listed. 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:** LiFT LED offered with a 5-year limited warranty. Covers LED, driver and fixture.