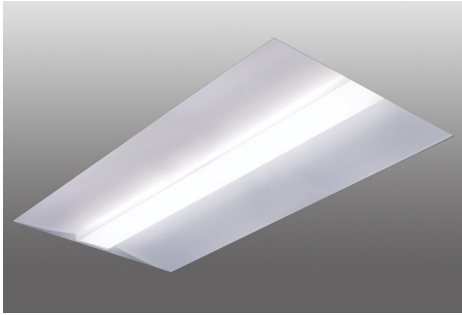
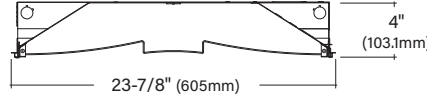




LUCEN LU24

2x4 Architectural Recessed



Key Features

- Formed 22 gauge cold rolled steel housing
- Highly reflective die-formed white painted reflector
- Wiring access available on both ends and top of housing
- LED offered with a 5-year limited warranty. Covers LED, driver and fixture
- UL and cUL Listed, LO, MO, and HO lumen packages are IC Rated
- Room-Side Maintenance for LED system



Example Part #: LU24-A-830HO-G1-U-FSD-1-0-W

LU24 - SHIELDING - CRI, CCT & OUTPUT - MOUNTING - VOLTAGE - DRIVER - CIRCUITING - BATTERY & EMERGENCY - FINISH - FIXTURE OPTIONS - CONTROLS

---	---	---	---
SHIELDING	SOURCE ^{1, 2}	MOUNTING	VOLTAGE ³
A - Satine Lens <i>QS</i> <i>Shielding pg. 2</i>	_27_ - 2700K _30_ - 3000K _35_ - 3500K _40_ - 4000K TW - 2CH Tunable White (2700-6500K, 90CRI) CL - Custom Lumens CW - Custom Watts MOD - Mod options available <i>Lumen Output pg. 2</i>	G1 - 15/16" Grid <i>QS</i> G9 - 9/16" Grid <i>QS</i> GS - Screw Slot Grid <i>QS</i> FL - Flanged S - Surface Mount <i>Mounting pg. 3</i>	U - Universal (120 thru 277V) <i>QS</i> 1 - 120V <i>QS</i> 2 - 277V <i>QS</i> 3 - 347V <i>Voltage pg. 3</i>
---	---	---	---
DRIVER	CIRCUITING ⁴	BATTERY & EMERGENCY	FINISH
FSD - Factory Select Driver (1%, 0-10v) <i>QS</i> 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) PR1 - Advance Xitanium SR MOD - Mod options available <i>Driver pg. 4</i>	1 - Single Circuit <i>QS</i> E - Emergency (entire fixture) <i>QS</i> N - Night Light (entire fixture) <i>QS</i> <i>Circuiting pg. 4</i>	0 - None <i>QS</i> FSB - Factory Select Battery <i>QS</i> FSG - Factory Select ALCR 1PLL - Bodine 10W 1ILL - Iota 10W GI - Iota ETS DR GB - Bodine GTD <i>Battery and Emergency pg. 4</i>	W - White <i>QS</i> MOD - Mod options available <i>Finish pg. 5</i>
---	---	---	---
FIXTURE OPTIONS ⁵	CONTROLS ⁶		
QS - QuickShip <i>QS</i> TW - Through-wiring CP - Chicago Plenum AM - Antimicrobial Paint FW6 - 6' Flex Whip <i>QS</i> GLR - Fast Blow Fusing <i>QS</i> GMF - Slow Blow Fusing MOD - Mod options available <i>Fixture Options pg. 5</i>	DLMFC - Wattstopper DLM DLMFS - Wattstopper LLLC EASYS - Philips EasySense SNSLM - Wattstopper PLUS SensiLUM WVLX - Eaton WaveLinX VDO - Lutron Vive Sensor VRF - Lutron Vive Connected MOD - Mod options available <i>Controls pg. 6</i>		

¹When specifying SOURCE the first _ is for specifying either 8 - 80CRI, 9 - 90CRI. The ending _ are for specifying output, example 835HO - 80CRI, 3500K 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) or Night Light (N) options with Tunable White option. ⁵If specifying QuickShip, QS must be used in fixture options section of part number to qualify. ⁶Controls can only be used with Single Circuit (1) or Emergency Circuit (E). See Controls chart on page 5 for driver options and more information



Shielding

- Single piece extruded diffuse lens with convex wings and articulated center spine
- Fully luminous housing with optimal glare control
- Highly reflective white reflectors maintain uniform lens brightness

A

Satine Lens



Output

- Specify either 80 or 90 CRI for White light LED
- Longer lead-time may apply for 90 CRI or 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
- 90 CRI = R9≥50

Custom Output- Lumens OR Wattage

CL _____	Specify CRI, CCT and desired lumens (i.e. CL8351200)	Specify lumens between standard offering listed below. Lumens are specified per color temp
CW _____	Specify CRI, CCT and desired wattage (i.e. CW94015)	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.

80 CRI

	Color	Output	Watts	Shielding A Satine Lens	
				Lumens	LPW
830LO	3000K	Low	22.1	3114	141
830MO		Middle	29.8	4095	137
830HO		High	36.8	5052	137
830VHO		Very High	55.0	7265	132
835LO	3500K	Low	22.1	3127	142
835MO		Middle	29.8	4112	138
835HO		High	36.8	5073	138
835VHO		Very High	55.0	7295	133
840LO	4000K	Low	22.1	3211	145
840MO		Middle	29.8	4222	142
840HO		High	36.8	5209	142
840VHO		Very High	55.0	7491	136

90 CRI

927LO	2700K	Low	22.1	2583	117
927MO		Middle	29.8	3396	114
927HO		High	36.8	4189	114
927VHO		Very High	55.0	6024	110
930LO	3000K	Low	22.1	2645	120
930MO		Middle	29.8	3478	117
930HO		High	36.8	4291	117
930VHO		Very High	55.0	6171	112
935LO	3500K	Low	22.1	2761	125
935MO		Middle	29.8	3630	122
935HO		High	36.8	4478	122
935VHO		Very High	55.0	6440	117
940LO	4000K	Low	22.1	2834	128
940MO		Middle	29.8	3726	125
940HO		High	36.8	4597	125
940VHO		Very High	55.0	6611	120

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

TWLO	2700 - 6500K	Low	29.1	3100	106.6
TWMO		Middle	39.2	4100	104.7
TWHO		High	48.8	5100	104.6
TWVHO		Very High	82.7	7400	89.5

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

LU24_LED_SPEC_AUGUST2026



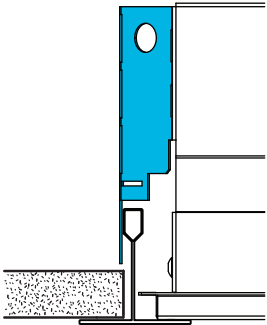
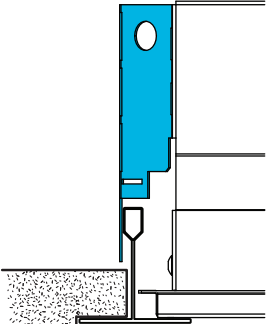
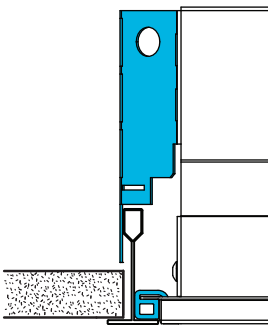
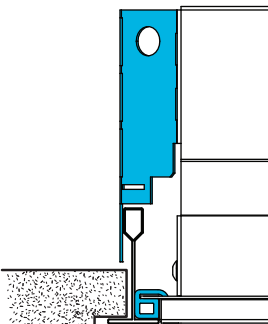
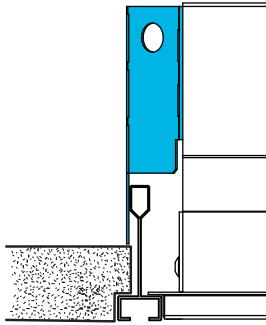
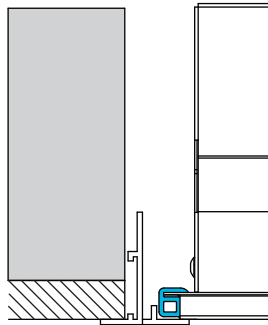
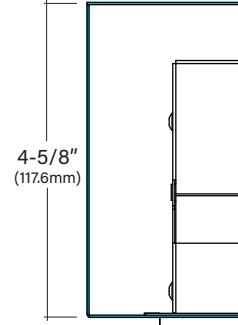
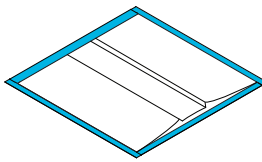
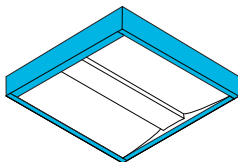
Direct Source: MOD Options

- Specify **MOD** in the part number for any of the below options
- All RGB_Source Options will require specific driver and control
- Consult factory for **MOD** specification details, pricing, and lead-time information

MOD		Required Driver	Required Control
		EC1	DMX
	Color Changing RGB LED	EC1	DMX
	Color Changing RGB-W LED		

Mounting

- LUCEN is offered with a universal flange for all grid types. See below for fixture placement in relation to the tile for each grid type
- Grid retention clips integral to housing and require mechanical attachment
- Tie off fixture to structure with retention wires
- Refer to installation instructions during installation at the jobsite
- Maximum fixture weight is 25lbs - Surface Mount Box adds 10 lbs

G1	G9	GS	FL	S
1" Grid Mount <i>Works with 15/16" grid ceiling types. See profile for fixture position in relation to ceiling grid and tile.</i>	9/16" Grid Mount <i>Works with 9/16" grid ceiling type. For tegular tile installations, fixture position will not be flush to the bottom of the tile. See tegular tile profile image below.</i>	Screw Slot Mounting <i>Works with screw slot and bolt slot grid ceiling types.</i>	Flange Kit <i>A separate flange kit is supplied for installations into inaccessible or drywall applications. Flange kit ships from factory uninstalled separately from fixture.</i>	Surface Mount <i>Utilize for hard lid ceiling applications. The 20 gauge steel frame easily secures to ceiling. Surface Mount Box adds 10 lbs</i>
 Standard Tile  Tegular Tile	 Standard Tile  Tegular Tile			 4-5/8" (117.6mm)  

Voltage

- Some LUCEN 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
- Some LUCEN 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
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
OL5	eldoLED Optotronic 1%, 0-10v, AUX
PL5	Advance Xitanium 1%, 0-10v, AUX

DALI Drivers

EE3	eldoLED ECOdrive 1%, DALI 2, Logarithmic, DT6
ES3	eldoLED SOLOdrive 0.1%, DALI 2, Logarithmic, DT6
OD1	eldoLED Optotronic 1%, DEXAL, DALI 2, DT6, Self powered link
PR1	Advance Xitanium SR, DALI 2, Self powered link

Lutron Drivers

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

Alternate Drivers

PS1	Advance Xitanium Step Dimming 50%/100%
EH1	ERP 1%, Line Voltage and ELV, requires 120v

Driver: MOD Options

- Specify **MOD** in the part number for any of the below options
- Consult factory for **MOD** specification details, pricing, and lead-time information

MOD	Power Over Ethernet
------------	---------------------

Circuiting

- Select fixture circuiting from options below
- Some LUCEN configurations will not accommodate all circuiting options; consult with factory
- Consult factory for Emergency (E) or Night Light (N) circuit with Tunable White (TW) option

1	Single Circuit
E	Emergency Circuit only
N	Night Light Circuit only

Battery & Emergency

- Select battery or emergency options if required
- Battery duration is 90 minutes
- For Tunable White (TW) option, battery with illuminate 6500K LED unless otherwise specified.
- Test button is integral to fixture
- For more Battery options, see Pinnacle Resource Guide
- Consult factory for Emergency Control Devices with Tunable White (TW) option

0	No Battery
FSB	Factory Select Battery 10w, Integral Lithium
FSBST	Factory Select Battery 10w, Integral Lithium, 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 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: 1-1FSB
- Emergency circuit only, 10w integral battery Ordering Code: E-1PLL



Finish

- Powder-coat white painted finish

W White

Finish: MOD Options

- Specify **MOD** in the part number for any of the below options
- Consult factory for **MOD** specification details, pricing, and lead-time information

MOD	Wood Grain
	Acoustic
	Metallic Silver
	Textured Black
	Bronze
	Graphite
	Custom Color

Fixture Options

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

QS	Quick Ship
TW	Through-Wiring
CP	Chicago Plenum
AM	Antimicrobial Paint
FW6	Flex Whip 6'
GLR	Internal Fast Blow Fuse
GMF	Internal Slow Blow Fuse

Fixture Options: MOD Options

- Specify **MOD** in the part number for any of the below options
- Consult factory for **MOD** specification details, pricing, and lead-time information

MOD	Remote Driver
	End Power Feed

Quick Ship

Shielding	Output	Mounting	Voltage	Driver	Circuiting	Battery	Finish	Options
10-Day								
A Satine Lens	80 CRI, All color temperatures, all lumen packages <i>See pg 4</i>	G1 1" Grid G9 9/16" Grid GS Screw Slot	U Universal 1 120v 2 277v	FSD Factory Select Driver <i>(1%, 0-10v)</i>	1 Single E Emergency N Night Light	0 None FSB Factory Select Battery	W White	CP Chicago Plenum FW6 Flex Whip 6' 18-gauge GLR Internal Fast-Blow Fuse

Consult Factory for projects that are larger than 200 units.



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
- Controls only compatible with Satine Lens.
- Must specify required driver in Driver Section
- Consult factory for available controls with Tunable White (TW) option

	Solution	Components	Network/Sensor	Connection	Required Drivers	Limitations
DLMFC	Legrand Wattstopper DLM	LMFC-011	Digital Lighting Management (DLM)	Wired, two RJ45 ports	OL2, OL4	None
DLMFS	Legrand Wattstopper LLLC	LMFS-601-W / LMFI-111	Wireless DLM Fixture Sensor	Wireless	OD1, PR1, 0-10v	0-10v requires interface
EASYS	Philips EasySense	SNS-210	Daylight/PIR Occupancy	Wireless to switches	PR1	Not available with 347 volt
SNSLM	Wattstopper PLUS SensiLUM	EN-CLM-PIR-DD-ZB	Encelium, Daylight/PIR Occupancy	Wireless	OD1, OL5	Not available with 347 volt
WLVX	Eaton WaveLinx	SWPD1, MSP3IVMVDC1	WaveLinx WCL, Daylight	Wireless	Any 0-10v	Not available with 347 volt
VDO	Lutron Vive Sensor	DFCSJ-OEM-OCC	Vive, Daylight/PIR Occupancy	Wireless	OD1, PR1	Not available with 347 volt
VRF	Lutron Vive Connected	DFCSJ-OEM-RF	Vive	Wireless	OD1, PR1	Not available with 347 volt

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

		Required Driver
MOD	Acuity nLight Air Wireless Connected	EE6, ES6

Approvals & Certifications

Construction: Formed 22 gauge cold rolled steel housing. Highly reflective die-formed reflectors maintain uniform lens brightness. Wiring access on both sides and top of housing. Housing designed to maintain optimal temperature of LED diodes and driver. Captive door frame swings open for room-side maintenance of lens, driver and LED boards.

Shielding: Single piece extruded diffuse lens with convex wings and articulated center spine creating a fully luminous housing with optimal glare control.

Mounting: Designed to install into acoustical grid and inaccessible ceilings. Specify G1, G9 or GS for acoustical grid ceiling. Specify FL 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%. Luminaire configurations tested in accordance with IES LM-79. Diodes tested in accordance with IES LM-80. Lifetime calculated using IES TM-21. TM-21-21 Lifetime Rating L70 = >54,000 hours, L90 = >54,000 hours. MacAdam 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. Four lumen packages available. Low (LO), Medium (MO), High (HO) and Very High (VHO). 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 PL4 or OL4 in Driver section when 347 volt (3) is selected. Some LUCEN 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 112°F/45°C. For more driver options, see Pinnacle Resource Guide. Some LUCEN configurations will not accommodate all driver options.

Circuiting: Select from single circuit (1), Emergency circuit (E) or Night Light circuit (N). Some LUCEN 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.

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

Controls: Standard options available, refer to Controls section table for available options, component part number(s), connection type, required driver and limitations. Mod options available, consult with factory.

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 - Surface Mount Box 10 lbs.

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