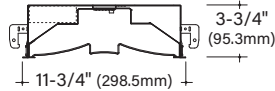


LUCEN LU14

1x4 Architectural Recessed



Key Features

- Pre-painted 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
- Pre-painted fixtures are to be used in dry locations only
- For damp location, must specify Paint After Fabrication (PAF) in the Options section of the luminaire specification
- Maximum fixture weight is 15 lbs - Surface Mount Box adds 10 lbs
- Room-Side Maintenance for LED system
- Indigo-Clean available, see Indigo-Clean specification sheets for details



Example Part #: LU14-A-830HO-G1-U-OL2-1-0-W

LU14 - SHIELDING - CRI, CCT & OUTPUT - MOUNTING - VOLTAGE - DRIVER - CIRCUITING - BATTERY & EMERGENCY - FINISH - FIXTURE OPTIONS - CONTROLS

SHIELDING	SOURCE QS ¹	MOUNTING	VOLTAGE
A - Satine Lens QS _→ W - White Rails QS _→ S - Silver Rails QS _→ <i>Shielding pg. 2</i>	27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K CL - Custom Lumens CW - Custom Watts MOD - Mod options available <i>Lumen Output pg. 2</i>	G1 - 15/16" Grid QS _→ G9 - 9/16" Grid QS _→ GS - Screw Slot Grid QS _→ FL - Flanged S - Surface Mount <i>Mounting pg. 3</i>	U - Universal (120 thru 277V) QS _→ 1 - 120V QS _→ 2 - 277V QS _→ 3 - 347V <i>Voltage pg. 3</i>
DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH
FSD - Factory Select Driver (1%, 0-10V) QS _→ PL2 - Advance Xitanium (1%, 0-10V) QS _→ OL2 - eldoLED Optotronic (1%, 0-10V) QS _→ OL4 - eldoLED Optotronic 347V (1%, 0-10V) EE1 - eldoLED ECODrive (1%, 0-10V) ES1 - eldoLED ECODrive (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 QS _→ E - Emergency QS _→ <i>(entire fixture)</i> N - Night Light QS _→ <i>(entire fixture)</i> <i>Circuiting pg. 4</i>	0 - None QS _→ FSB - Factory Select Battery FSG - Factory Select ALCR GI - Iota ETS DR GB - Bodine GTD 1IC - Iota 10W, CEC Listed QS _→ 1P - Bodine 10W QS _→ <i>Battery and Emergency pg. 4</i>	W - White QS _→ MOD - Mod options available <i>Finish pg. 5</i>
FIXTURE OPTIONS ²	CONTROLS ³		
QS - QuickShip QS _→ TW - Through-wiring CP - Chicago Plenum QS _→ AM - Antimicrobial Paint FW6 - 6' Flex Whip QS _→ GLR - Fast Blow Fusing QS _→ GMF - Slow Blow Fusing PAF - Paint after fabrication BA - Buy American Act Compliant DSP - Customer Supplied Battery/Driver/ Sensor MOD - Mod options available <i>Fixture Options pg. 5</i>	DLMFC - Wattstopper DLM (wired) DLMFS - Wattstopper LLLC (wireless) EASYS - Philips EasySense (wireless) SNSLM - Encelium Sensilum (wireless) WVLX - Eaton WaveLinX (wireless) VDO - Lutron Vive Sensor (wireless) VRF - Lutron Vive Connected (wireless) ENL - Enlighted, "C" Connected Lighting or "I" IOT ENL2 - Enlighted 2-Wire, "C" Connected Lighting or "I" IOT MOD - Mod options available <i>Control Options pg. 6</i>		

¹When specifying SOURCE the first _ is for specifying either 8 - 80CRI, 9 - 90CRI or B - BIOS. The ending _ are for specifying output, example HO - High Output. When specifying BIOS use B and then specify color temperature, either 3500K or 4000K, and output, example B35HO - BIOS 3500K High Output. See output charts for more information. BIOS dynamic available, please contact factory for more information. ²If specifying QS, QS must be used in fixture options section of part number to qualify. ³Controls can only be used with Single Circuit (1) or Emergency Circuit (E). 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

- 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

Ordering Code

A	W	S
Satine Lens	Satine Lens with White Trim	Satine Lens with Silver Trim
		

Output

- Specify either 80 or 90 CRI
- Longer lead-time may apply for 90 CRI. Consult factory.
- 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

80 CRI

	Color	Output	Watts	Shielding		W		S	
				A		White Trim		Silver Trim	
				Lumens	LPW	Lumens	LPW	Lumens	LPW
830LO	3000K	Low	17.9	1931	107.9	1742	97.3	1644	91.8
830MO	3000K	Middle	25.9	2881	111.2	2599	100.3	2452	94.7
830HO	3000K	High	36.5	3934	107.8	3548	97.2	3348	91.7
835LO	3500K	Low	17.9	1985	110.9	1790	100.0	1689	94.4
835MO	3500K	Middle	25.9	2961	114.3	2671	103.1	2520	97.3
835HO	3500K	High	36.5	4043	110.8	3647	99.9	3441	94.3
840LO	4000K	Low	17.9	2107	117.7	1901	106.2	1793	100.2
840MO	4000K	Middle	25.9	3145	121.4	2837	109.5	2676	103.3
840HO	4000K	High	36.5	4287	117.5	3867	105.9	3648	100.0

90 CRI

927LO	2700K	Low	17.9	1610	89.9	1452	81.1	1370	76.5
927MO	2700K	Middle	25.9	2401	92.7	2166	83.6	2044	78.9
927HO	2700K	High	36.5	3279	89.8	2958	81.0	2790	76.4
930LO	3000K	Low	17.9	1779	99.4	1605	89.6	1514	84.6
930MO	3000K	Middle	25.9	2654	102.5	2394	92.4	2259	87.2
930HO	3000K	High	36.5	3624	99.3	3269	89.6	3084	84.5
935LO	3500K	Low	17.9	1785	99.7	1610	89.9	1519	84.9
935MO	3500K	Middle	25.9	2662	102.8	2401	92.7	2265	87.5
935HO	3500K	High	36.5	3635	99.6	3279	89.8	3093	84.8
940LO	4000K	Low	17.9	1880	105.0	1696	94.7	1600	89.4
940MO	4000K	Middle	25.9	2806	108.3	2531	97.7	2388	92.2
940HO	4000K	High	36.5	3825	104.8	3450	94.5	3255	89.2



Direct Source: MOD Options

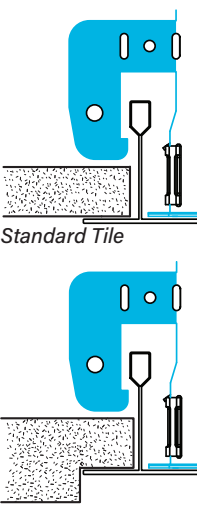
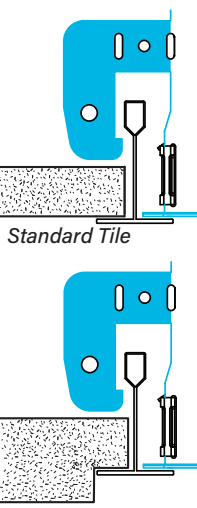
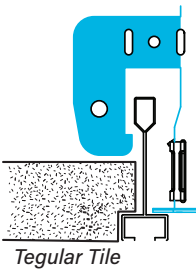
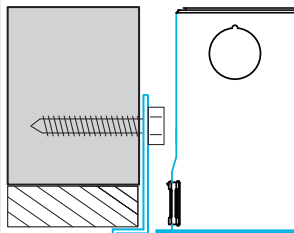
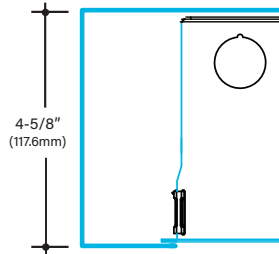
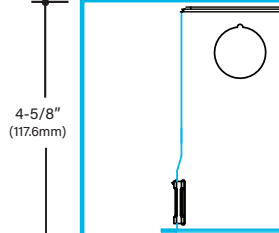
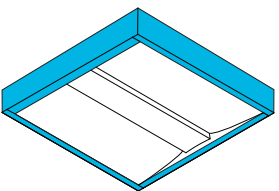
- Specify **MOD** in the part number for any of the below options
- All RGB_Source Options will require specific driver and control

- Consult factory for **MOD** specification details, pricing, and lead-time information

MOD	Color Changing RGB LED	Required Driver	Required Control
	Color Changing RGB-W LED	EC1/EC4	DMX
	2 Channel Tunable White	EC1/EC4	DMX
	Dynamic BIOS		

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
- Approved for dry/damp location when PAF is specified
- Maximum fixture weight is 15lbs - 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>
 <p>Standard Tile</p> <p>Tegular Tile</p>	 <p>Standard Tile</p> <p>Tegular Tile</p>	 <p>Tegular Tile</p>	 	 <p>4-5/8" (117.6mm)</p> 

Voltage

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

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 (logarithmic)
ES3	eldoLED SOLOdrive .1%, DALI (logarithmic)
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	Signify Advance Xitanium Step Dimming 50%/100%
PR1	Philips Advance Xitanium SR, requires EASYS, VDO or VRF
OD1	eldoLED Optotronic 1%, DEXAL
EH1	ELV 120v only, 0-10v universal

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

1	Single Circuit
E	Emergency Circuit only (uses n/O EZ PH ER with NLIGHT)
N	Night Light Circuit only

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

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

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.

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LU14_LED_SPEC_JULY2024

Finish

- Pre-painted white polyester polymer finish, optional paint after fabrication (PAF) option available

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
AR	Air Return
FW6	Flex Whip 6'
GLR	Internal Fast Blow Fuse
GMF	Internal Slow Blow Fuse
BA	Buy American Act Compliant
DSP	Customer Supplied Battery/Driver/Sensor
PAF	Paint After Fabrication

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	U 1 2	FSD	1 E N	1P	W
W	White Rails		G9	9/16" Grid		PL2			
S	Silver Rails		GS	Grid Screw Slot		OL2			
				Universal 120v 277v		Factory Select Driver (1%, 0-10v) Advance Xitanium 0-10v, 1% Osram 0-10v, 1%		Bodine 10w Integral Iota 10w Integral	
									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

	Solution	Components	Network/Sensor	Connection	Required Drivers	Limitations
DLMFC	Legrand Wattstopper DLM	LMFC-011	Digital Lighting Management (DLM)	Wired, two RJ45 ports	OL2, OL4	Not available with Battery
DLMFS	Legrand Wattstopper LLLC	LMFS-601-W / LMFI-111	Wireless DLM Fixture Sensor	Wireless	OD1, PR1I or 0-10v	0-10v requires interface
EASYS	Philips EasySense	SNS-210	Daylight/PIR Occupancy	Wireless to switches	PR1	Not available with 347 volt
SNLSM	Encelium 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
ENLI	Enlighted IOT	SU-5E-IOT, CU-4E	Enlighted, Daylight/PIR Occupancy	Wireless	Any 0-10v	Not available with 347 volt
ENLC	Enlighted Connected Lighting	SU-5E-CL, CU-4E	Enlighted, Daylight/PIR Occupancy	Wireless	Any 0-10v	Not available with 347 volt
ENL2I	Enlighted 2-Wire IOT	KIT-SU-5E-D-IOT	Enlighted, Daylight/PIR Occupancy	Wireless	OD1 or PR1	Not available with 347 volt
ENL2C	Enlighted 2-Wire Connected Lighting	KIT-SU-5E-D-CL	Enlighted, Daylight/PIR Occupancy	Wireless	OD1 OR PR1	Not available with 347 volt

Controls: MOD Options

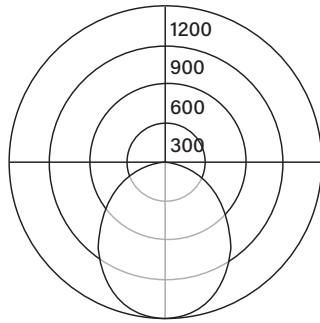
- Specify **MOD** in the part number for any of the below options
- Control** Options may require specific driver. Refer to the chart below
- Consult factory for **MOD** specification details, pricing, and lead-time information

		Required Driver
MOD	Encelium Sensilum	OD1, OL5
	Acuity nLight Air Wireless Connected	EE6, ES6

Photometrics

Satine Lens

Test #	ITL88926
Catalog #	LU14A-840MO
Lumens	3145 lm
Watts	25.9 W
Efficacy	121 LPW



Candela Distribution

Vert Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1200	1200	1200	1200	1200
5	1195	1194	1192	1191	1192
10	1176	1170	1169	1166	1164
15	1143	1134	1133	1129	1124
20	1098	1085	1085	1078	1074
25	1042	1028	1026	1018	1013
30	977	960	958	950	945
35	902	886	883	876	869
40	821	807	804	797	791
45	735	724	721	714	708
50	647	638	635	630	623
55	556	550	550	543	539
60	463	462	462	456	454
65	371	373	375	370	369
70	279	286	291	288	286
75	191	202	209	206	205
80	109	124	130	126	125
85	42	54	52	49	49
90	0	0	0	0	0

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3456	3390	3329
55	3223	3188	3124
65	2919	2950	2903
75	2454	2685	2633
85	1602	1984	1869



Approvals & Certifications

Construction: Pre-painted 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. Available with standard satine lens or optional white or silver lens side rails.

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. Maximum fixture weight is 15 lbs - Surface Mount Box adds 10 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 = 123,100 hours and L90 = 36,700 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.

Color & Lumen Output: 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. 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 LUCEN configurations will not accommodate all voltage options; consult with factory.

Driver: Standard Driver Option is Advance Xitanium 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. Ambient operating range: -20°F/-30°C to 91°F/33°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: Pre-painted white polyester polymer finish on exposed trim. Optional Paint After Fabrication (PAF) available if specified in Options section of part number.

Controls: DLM utilizes wired network connections for digital control through switching and dimming. nLight Air rES7 sensor provides wireless control, daylight harvesting and occupancy detection with PIR or PDT using eldoLED LED drivers. EasySense sensor provides daylight harvesting and PIR occupancy detection using the SR LED driver; the Philips app provides advanced configurations. ENCELUM SensiLUM sensor provides wireless control, daylight harvesting and PIR occupancy; driver data is available when using the DEXAL driver. ENCELUM SensiLUM sensor provides wireless control, daylight harvesting and PIR occupancy; driver data is available when using the DEXAL driver. WaveLinx Connected Lighting sensor provides wireless control and daylight harvesting using 0-10V LED drivers. Lutron Vive sensor provides wireless control, daylight harvesting and PIR occupancy detection using DEXAL or SR LED drivers. Lutron Vive module provides wireless control using DEXAL or SR LED drivers.

Labels: UL and cUL 1598 listed. LO, MO, and HO lumen packages are IC Rated. Pre-painted fixtures are to be used in dry locations only. For damp location, must specify Paint After Fabrication (PAF) in the Options section of the luminaire.

Fixture Weight: 15 lbs maximum - Surface Mount Box adds 10 lbs.

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