PINNACLE
ARCHITECTURAL LIGHTING®

LUCEN LU11
1x1 Architectural Recessed

4" (101.6mm)

12-5/8" (320.7mm)
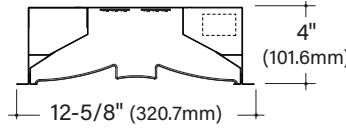
Key Features

- 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. STD and HO 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 12 lbs - Surface Mount Box adds 10 lbs
- Room-Side Maintenance for LED system
- Buy American Act compliant

Example Part #: LU11-A-830HO-G1-U-OL2-1-0-W

LU11

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

SHIELDING	SOURCE[1]	MOUNTING	VOLTAGE
A - Satine Lens	**_27_ _** - 2700K	**G1 -** 15/16" Grid	**U -** Universal *(120 thru 277V)*
W - White Rails	**_30_ _** - 3000K	**G9 -** 9/16" Grid	**1 -** 120V
S - Silver Rails	**_35_ _** - 3500K	**GS -** Screw Slot Grid	**2 -** 277V
Shielding pg. 2	**_40_ _** - 4000K	**FL -** Flanged	**3 -** 347V
	CL_ _ _ _ _ _ - Custom Lumens	**S -** Surface Mount	*Voltage pg. 3*
	CW_ _ _ _ _ _ - Custom Watts	*Mounting pg. 3*	
	MOD - Mod options available		
	Lumen Output pg. 2		

DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH
FSD - Factory Select Driver *(1%, 0-10v)*	**1 -** Single Circuit	**0 -** None	**W -** White
PL2 - Advance Xitanium *(1%, 0-10v)*	**E -** Emergency *(entire fixture)*	**FSG -** Factory Select ALCR	**MOD** - Mod options available
OL2 - eldoLED Optotronic *(1%, 0-10v)*	**N -** Night Light *(entire fixture)*	**GI -** Iota ETS DR	*Finish pg. 4*
OL4 - eldoLED Optotronic 347v *(1%, 0-10v)*	*Circuiting pg. 4*	**GB -** Bodine GTD	
EE2 - eldoLED ECOdrive *(1%, 0-10v)*		**1PRL -** Bodine 7W Remote	
ES2 - eldoLED SOLOdrive *(0%, 0-10v)*		*Battery and Emergency pg. 4*	
OL5 - eldoLED Optotronic *(1%, 0-10v, AUX)*			
LH1 - Lutron Hi-lume *(1%, EcoSystem)*			
MOD - Mod options available			
Driver pg. 3			

FIXTURE OPTIONS	CONTROLS[2]
TW - Through-Wiring	**DLMFC -** Wattstopper DLM *(wired)*
CP - Chicago Plenum	**WVLX -** Eaton WaveLinx *(wireless)*
AM - Antimicrobial Paint	**NLIGHT -** Acuity nLight *(wired)*
FW6 - 6' Flex Whip	**MOD -** Mod options available
GLR - Fast Blow Fusing	*Controls pg. 5*
GMF - Slow Blow Fusing	
PAF - Paint After Fabrication	
DSP - Customer Supplied Battery/Driver/Sensor	
MOD - Mod options available	
Fixture Options pg. 4	

[1]When specifying CRI, CCT & OUTPUT the first _ is for specifying either **8** - 80CRI or **9** - 90CRI The ending _ _ are for specifying output, example **HO** - High Output. See output charts for more information. [2]Controls can only be used with Satine Lens (**A**), Single Circuit (**1**) or Emergency Circuit (**E**). **NLIGHT_** options have visable antena. See Controls chart on page 4 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 A Satine Lens *Lumens*	*LPW*	W White Trim *Lumens*	*LPW*	S Silver Trim *Lumens*	*LPW*
830LO	3000K	Standard	11.3	845	74.7	762	67.4	719	63.6
830HO	3000K	High	24.9	1880	75.5	1696	68.1	1600	64.2
835LO	3500K	Standard	11.3	869	76.9	784	69.4	740	65.4
835HO	3500K	High	24.9	1934	77.7	1744	70.1	1646	66.1
840LO	4000K	Standard	11.3	886	78.4	799	70.7	754	66.7
840HO	4000K	High	24.9	1971	79.1	1778	71.4	1677	67.4

90 CRI

	Color	Output	Watts	Satine Lens *Lumens*	*LPW*	White Trim *Lumens*	*LPW*	Silver Trim *Lumens*	*LPW*
927LO	2700K	Standard	11.3	667	59.1	602	53.3	568	50.3
927HO	2700K	High	24.9	1485	59.7	1340	53.8	1264	50.8
930LO	3000K	Standard	11.3	778	68.8	702	62.1	662	58.6
930HO	3000K	High	24.9	1732	69.6	1562	62.7	1474	59.2
935LO	3500K	Standard	11.3	782	69.2	705	62.4	665	58.9
935HO	3500K	High	24.9	1739	69.8	1569	63.0	1480	59.4
940LO	4000K	Standard	11.3	790	69.9	713	63.1	672	59.5
940HO	4000K	High	24.9	1758	70.6	1586	63.7	1496	60.1

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

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

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pg. 2

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 12lbs - Surface Mount Box adds 10 lbs

G1	G9	GS	FL	S
1" Grid Mount *Works with 15/16" grid ceiling types. See profile for fixture position in relation to ceiling grid and tile.*	**9/16" Grid Mount** *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.*	**Screw Slot Mounting** *Works with screw slot and bolt slot grid ceiling types.*	**Flange Kit** *A separate flange kit is supplied for installations into inaccessible or drywall applications. Flange kit ships from factory uninstalled separately from fixture.*	**Surface Mount** *Utilize for hard lid ceiling applications. The 20 gauge steel frame easily secures to ceiling. Surface Mount Box adds 10 lbs*

Standard Tile (G1) — *Standard Tile* (G9) — *Tegular Tile* (GS)

4-5/8" (117.6mm) (S)

Tegular Tile (G1) — *Tegular Tile* (G9)

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
OL2	eldoLED Optotronic, 1%, 0-10v
OL4	eldoLED Optotronic 347v, 1% 0-10v (requires 347v)
OL5	eldoLED Optotronic 1%, 0-10v, AUX
Lutron Drivers	
LH1	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1
Alternate Drivers	
EH1	ELV 120v only, 0-10v universal

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Drivers: 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

_ILL	Iota 10w Integral Lithium, Self Testing
_IRC	Iota 10w Remote
_PLL	Bodine 10w Integral Lithium, Self Testing

Battery & Emergency

- Select battery or emergency options if required
- Battery duration is 90 minutes

- Test button is remote
- For more Battery options, see Pinnacle Resource Guide

0	No Battery
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
1IRC	Iota 10w Remote
1PRS	Bodine 7w Remote, Self Testing
1PRD	Bodine 10w Remote, Dual Flex

For Approximate Battery Lumen Output
- Multiply battery wattage X fixture LPW shown on Lumen Table
- 7 (watts) x 77.7 (LPW) = 544 battery lumen output

Battery & Emergency Ordering Examples
- Single circuit, 7w remote battery   Ordering Code: 1-1PRL
- Emergency circuit only, 7w remote battery Ordering Code: E-1PRL

Finish

- Powder-coat white painted finish on exposed trim

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
	TexturedBlack
	Bronze
	Graphite
	Custom Color

Fixture Options

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

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

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 drop per sensor typical, consult factory for more information
- Controls only compatable with Satine Lens.
- Required drivers must be specified in the 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
WLVX	Eaton WaveLinx	SWPD1, MSP3IVMVDC1	WaveLinx WCL, Daylight	Wireless	Any 0-10v	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
	Enlighted (Wireless) - ENLI	Any 0-10v
	Enlighted (Wireless) - ENLC	Any 0-10v
	Acuity nLight Air Wireless Connected	EE6, ES6

Photometrics

Satine Lens

Test #	ITL89104
Catalog #	LU11A-840
Lumens	869 lm
Watts	11.3 W
Efficacy	76.9 LPW

1329
997
666
332
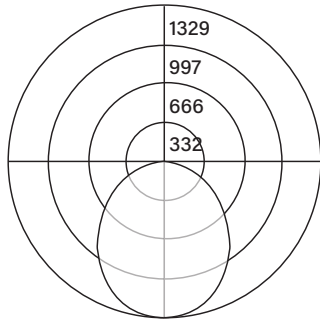
Candela Distribution

Vert Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	312	312	312	312	312
5	310	310	310	310	310
10	306	306	305	305	305
15	298	298	297	297	296
20	287	286	286	286	286
25	273	272	272	273	272
30	256	256	257	258	257
35	237	237	239	241	241
40	216	216	219	222	223
45	194	195	198	203	203
50	171	172	176	182	183
55	148	149	154	160	162
60	123	126	131	137	139
65	99	102	108	114	117
70	74	78	85	91	94
75	50	55	62	66	70
80	28	33	39	42	45
85	10	14	17	18	19
90	0	0	0	0	0

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4222	4309	4418
55	3971	4132	4347
65	3605	3933	4260
75	2973	3687	4162
85	1766	3002	3355

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

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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 12 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 = 105,000 hours and L90 = 30,000 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.

Color & Lumen Output: Two lumen packages available. Standard 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 Osram 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 94°F/34°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. nLight Air rIO module provides wireless control using eldoLED LED drivers. WaveLinx Connected Lighting sensor provides wireless control and daylight harvesting using 0-10V LED drivers.

Labels: UL and cUL 1598 listed. STD 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: 12 lbs maximum, Surface Mount Box adds 10 lbs.

Buy American Act Compliant

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

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