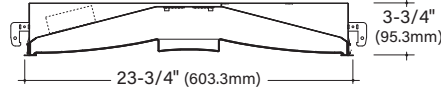


# LUCEN LU24

## 2x4 Architectural Recessed

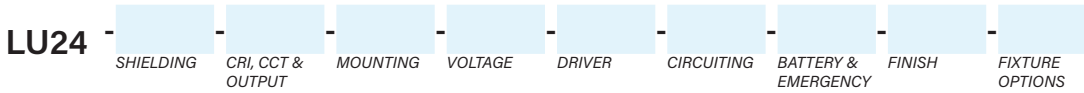


### Key Features

- Boards and driver are specifically for Indigo Clean®
- Indigo Clean® emits 405nm light which targets bacteria & produces intra-cellular Reactive Oxygen Species (ROS)
- Standard, white luminaire that provides on-demand disinfection when light is on
- Laboratory-tested disinfection
- Unlike UV disinfection, light is safe for occupants
- Proven effectiveness per independent lab test results
- Provides a cleaner, safer environment, even in areas normal cleaning doesn't reach



Example Part #: LU24-A-IC37-G1-U-ND-1-0-W



SHIELDING	CRI, CCT & OUTPUT	MOUNTING	VOLTAGE
<b>A</b> - Satine Lens	<b>IC37</b> - Indigo Clean LED, 3700K <b>IC43</b> - Indigo Clean LED, 4300K <i>Lumen Output pg. 2</i>	<b>G1</b> - 15/16" Grid <b>G9</b> - 9/16" Grid <b>GS</b> - Screw Slot Grid <b>FL</b> - Flanged <b>S</b> - Surface Mount <i>Mounting pg. 2</i>	<b>U</b> - Universal (120 thru 277V) <b>1</b> - 120V <b>2</b> - 277V <i>Voltage pg. 3</i>

DRIVER <sup>1</sup>	CIRCUITING	BATTERY & EMERGENCY	FINISH
<b>OL1</b> - Osram (10%, 0-10v) <b>ND</b> - Non-Dimming <i>Driver pg. 3</i>	<b>1</b> - Single Circuit <b>E</b> - Emergency ( <i>entire fixture</i> ) <b>N</b> - Night Light ( <i>entire fixture</i> ) <i>Circuiting pg. 3</i>	<b>0</b> - None <b>1P</b> - Bodine 10W <b>1I</b> - Iota 10W <b>1IC</b> - Iota 10W, CEC Listed <b>1G</b> - Bodine GTD <i>Battery and Emergency pg. 3</i>	<b>W</b> - White <i>Finish pg. 3</i>

FIXTURE OPTIONS <sup>2</sup>	CONTROLS
<b>TW</b> - Through-wiring <b>CP</b> - Chicago Plenum <b>AM</b> - Antimicrobial Paint <b>FW6</b> - 6' Flex Whip <b>GMF</b> - Slow Blow Fusing <b>PAF</b> - Paint After Fabrication <i>Fixture Options pg. 3</i>	<i>Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.</i>

<sup>1</sup> While we do offer dimmable driver options, please note that dimming is not recommended with Indigo-Clean fixtures as it can reduce the efficiency of disinfection. <sup>2</sup> Flex Whip (FW6) option not available with Chicago Plenum (CP) option.

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.



## Output

- 80 CRI R9 ≥ 23

## Indigo Clean LED

	Color	Watts	Shielding <b>A</b>	
			Satine Lens Lumens	LPW
<b>IC37</b>	3700K	60.7	5567	91.7
<b>IC43</b>	4300K	60.8	5693	93.6

## 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 25lbs - Surface Mount Box adds 10 lbs

G1	G9	GS	FL	S
<p><b>1" Grid Mount</b> Works with 15/16" grid ceiling types. See profile for fixture position in relation to ceiling grid and tile.</p>	<p><b>9/16" Grid Mount</b> 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.</p>	<p><b>Screw Slot Mounting</b> Works with screw slot and bolt slot grid ceiling types.</p>	<p><b>Flange Kit</b> A separate flange kit is supplied for installations into inaccessible or drywall applications. Flange kit ships from factory uninstalled separately from fixture.</p>	<p><b>Surface Mount</b> Utilize for hard lid ceiling applications. The 20 gauge steel frame easily secures to ceiling. Surface Mount Box adds 10 lbs</p>
<p>Standard Tile</p>	<p>Standard Tile</p>	<p>Tegular Tile</p>		<p>4-5/8" (117.6mm)</p>
<p>Tegular Tile</p>	<p>Tegular Tile</p>			



## Voltage

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

<b>U</b>	Universal
<b>1</b>	120 volt
<b>2</b>	277 volt

## Driver

- 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

<b>OL1</b>	Osram Optotronic 10%, 0-10v
<b>ND</b>	Non-Dimming

## Circuiting

- Select fixture circuiting from options below
- Some LUCEN 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

## 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

<b>0</b>	No Battery
<b>1P</b>	Philips Bodine 10w Integral, CEC Listed
<b>1I</b>	Iota 10w Integral
<b>1IC</b>	Iota 10w Integral, CEC Listed
<b>1G</b>	Philips Bodine GTD

### 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

<b>W</b>	White
----------	-------

## Fixture Options

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

<b>TW</b>	Through-Wiring
<b>CP</b>	Chicago Plenum
<b>AM</b>	Antimicrobial Paint
<b>FW6</b>	Flex Whip 6'
<b>GMF</b>	Internal Slow Blow Fuse
<b>PAF</b>	Paint After Fabrication

## Controls

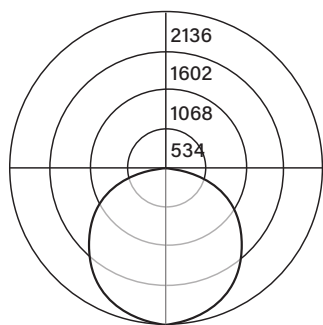
- Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.



## Photometrics

### Satine Lens

Test #	ITL93376
Catalog #	LU24A-IC43
Lumens	5693 lm
Watts	60.8 W
Efficacy	93.6 LPW



### Candela Distribution

Vert Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	2136	2136	2136	2136	2136
5	2126	2126	2125	2125	2126
10	2096	2092	2094	2092	2089
15	2046	2033	2039	2031	2026
20	1971	1955	1959	1946	1935
25	1877	1858	1855	1836	1826
30	1762	1741	1732	1715	1704
35	1627	1607	1592	1583	1582
40	1475	1458	1447	1451	1452
45	1314	1298	1297	1313	1323
50	1145	1134	1143	1170	1177
55	974	978	989	1015	1022
60	800	805	832	856	856
65	633	645	678	692	695
70	469	490	525	537	537
75	319	350	381	387	391
80	182	216	245	247	247
85	77	100	115	113	111
90	0	0	0	0	0

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2835	2799	2855
55	2591	2631	2719
65	2285	2448	2509
75	1881	2246	2305
85	1348	2013	1943

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:** 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 25 lbs - Surface Mount Box adds 10 lbs.

**Indigo Clean LED:** Spectrum focused lighting for continuous environmental disinfection. 25°C test environment. Lumen output/wattage has a margin of +/- 5%. All 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 = 80,000 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).

**Output:** One lumen package available. 80 CRI is available for 3700K and 4300K. 80 CRI = R9≥23.

**Voltage:** Universal (U), 120 volt (1) and 277 volt (2). Some LUCEN configurations will not accommodate all voltage options; consult with factory.

**Driver:** Standard Driver Option is Osram Optronic Non-dimming = ND. 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 118°F/48°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:** Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.

**Labels:** UL and cUL Listed. Approved for dry/damp location unless otherwise noted. For damp location, must specify Paint After Fabrication (PAF) in the Options section of the luminaire.

**Fixture Weight:** 25 lbs maximum - Surface Mount Box 10 lbs.

**Buy American Act Compliant**

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