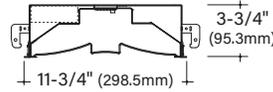


# LUCEN LU14

## 1x4 Architectural Recessed

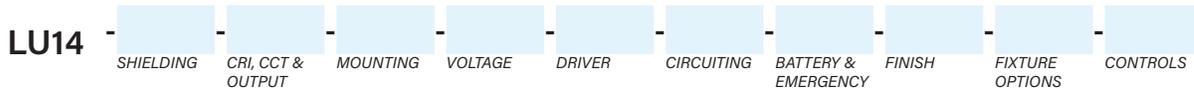


### Key Features

- 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 #: LU14-A-830HO-G1-U-FSD-1-0-W



SHIELDING	SOURCE <sup>QS</sup> 1, 2	MOUNTING	VOLTAGE <sup>3</sup>
<b>A</b> - Satine Lens <sup>QS</sup> <b>W</b> - White Rails <sup>QS</sup> <b>S</b> - Silver Rails <sup>QS</sup> <i>Shielding pg. 2</i>	<b>_27</b> - 2700K <b>_30</b> - 3000K <b>_35</b> - 3500K <b>_40</b> - 4000K <b>TW</b> - 2CH Tunable White (2700-6500K, 90CRI) <b>CL</b> - Custom Lumens <b>CW</b> - Custom Watts <b>MOD</b> - Mod options available <i>Lumen Output pg. 2</i>	<b>G1</b> - 15/16" Grid <sup>QS</sup> <b>G9</b> - 9/16" Grid <sup>QS</sup> <b>GS</b> - Screw Slot Grid <sup>QS</sup> <b>FL</b> - Flanged <b>S</b> - Surface Mount <i>Mounting pg. 3</i>	<b>U</b> - Universal (120 thru 277V) <sup>QS</sup> <b>1</b> - 120V <sup>QS</sup> <b>2</b> - 277V <sup>QS</sup> <b>3</b> - 347V <i>Voltage pg. 3</i>

DRIVER	CIRCUITING <sup>4</sup>	BATTERY & EMERGENCY	FINISH
<b>FSD</b> - Factory Select Driver (1%, 0-10v) <sup>QS</sup> <b>PL2</b> - Advance Xitanium (1%, 0-10v) <b>OL2</b> - eldoLED Optotronic (1%, 0-10v) <b>OL4</b> - eldoLED Optotronic 347v (1%, 0-10v) <b>EE1</b> - eldoLED ECOdrive (1%, 0-10v) <b>ES1</b> - eldoLED ECOdrive (0.1%, 0-10v) <b>LH1</b> - Lutron Hi-lume (1%, EcoSystem) <b>PR1</b> - Advance Xitanium SR <b>MOD</b> - Mod options available <i>Driver pg. 4</i>	<b>1</b> - Single Circuit <sup>QS</sup> <b>E</b> - Emergency <sup>QS</sup> <i>(entire fixture)</i> <b>N</b> - Night Light <sup>QS</sup> <i>(entire fixture)</i> <i>Circuiting pg. 4</i>	<b>0</b> - None <sup>QS</sup> <b>FSB</b> - Factory Select Battery <sup>QS</sup> <b>FSG</b> - Factory Select ALCR <b>GI</b> - Iota ETS DR <b>GB</b> - Bodine GTD <b>1ILL</b> - Iota 10W <b>1PLL</b> - Bodine 10W <i>Battery and Emergency pg. 4</i>	<b>W</b> - White <sup>QS</sup> <b>MOD</b> - Mod options available <i>Finish pg. 5</i>

FIXTURE OPTIONS <sup>5</sup>	CONTROLS <sup>6</sup>
<b>QS</b> - QuickShip <sup>QS</sup> <b>TW</b> - Through-wiring <b>CP</b> - Chicago Plenum <sup>QS</sup> <b>AM</b> - Antimicrobial Paint <b>FW6</b> - 6' Flex Whip <sup>QS</sup> <b>GLR</b> - Fast Blow Fusing <sup>QS</sup> <b>GMF</b> - Slow Blow Fusing <b>DSP</b> - Customer Supplied Battery/Driver/Sensor <b>MOD</b> - Mod options available <i>Fixture Options pg. 5</i>	<b>DLMFC</b> - Wattstopper DLM (wired) <b>DLMFS</b> - Wattstopper LLLC (wireless) <b>EASYS</b> - Philips EasySense (wireless) <b>SNSLM</b> - Wattstopper PLUS SensiLUM (wireless) <b>WVLX</b> - Eaton WaveLinX (wireless) <b>VDO</b> - Lutron Vive Sensor (wireless) <b>VRF</b> - Lutron Vive Connected (wireless) <b>MOD</b> - Mod options available <i>Control Options pg. 6</i>

<sup>1</sup>When 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. <sup>2</sup>When 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. <sup>3</sup>Tunable White (TW) option only available with Universal (U), 120V (1) or 277V (2) options. <sup>4</sup>Consult factory for Emergency (E) or Night Light (N) options with Tunable White option. <sup>5</sup>If specifying QuickShip, QS must be used in fixture options section of part number to qualify. <sup>6</sup>Controls 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



## 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

<b>CL</b> _____	Specify CRI, CCT and desired lumens (i.e. CL8351200)	Specify lumens between standard offering listed below. Lumens are specified per color temp
<b>CW</b> _____	Specify CRI, CCT and desired wattage (i.e. CW94015)	Specify watts between standard offering listed below
<b>CLTW</b> _____	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		W White Trim		S Silver Trim	
				Lumens	LPW	Lumens	LPW	Lumens	LPW
<b>830LO</b>	3000K	Low	16.9	2228	132	2007	119	1898	112
<b>830MO</b>		Middle	21.3	2773	130	2499	117	2363	111
<b>830HO</b>		High	33.2	4207	127	3791	114	3585	108
<b>835LO</b>	3500K	Low	16.9	2237	132	2016	119	1906	113
<b>835MO</b>		Middle	21.3	2785	131	2509	118	2372	111
<b>835HO</b>		High	33.2	4225	127	3807	115	3600	108
<b>840LO</b>	4000K	Low	16.9	2297	136	2070	122	1957	116
<b>840MO</b>		Middle	21.3	2859	134	2576	121	2436	114
<b>840HO</b>		High	33.2	4338	131	3909	118	3696	111

### 90 CRI

<b>927LO</b>	2700K	Low	16.9	1848	109	1665	99	1574	93
<b>927MO</b>		Middle	21.3	2300	108	2072	97	1959	92
<b>927HO</b>		High	33.2	3489	105	3144	95	2973	90
<b>930LO</b>	3000K	Low	16.9	1893	112	1705	101	1612	95
<b>930MO</b>		Middle	21.3	2355	111	2122	100	2007	94
<b>930HO</b>		High	33.2	3574	108	3220	97	3045	92
<b>935LO</b>	3500K	Low	16.9	1975	117	1780	105	1683	100
<b>935MO</b>		Middle	21.3	2458	115	2215	104	2094	98
<b>935HO</b>		High	33.2	3730	112	3360	101	3178	96
<b>940LO</b>	4000K	Low	16.9	2027	120	1827	108	1727	102
<b>940MO</b>		Middle	21.3	2523	118	2274	107	2150	101
<b>940HO</b>		High	33.2	3829	115	3450	104	3262	98

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

<b>TWLO</b>	2700 - 6500K	Low	20.9	2100	100.7	1892	90.7	1789	85.8
<b>TWMO</b>		Middle	31.5	3100	98.5	2788	88.5	2636	83.7
<b>TWHO</b>		High	45.1	4300	95.4	3874	85.9	3663	81.2

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## 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 LED	EC1	DMX
	Color Changing RGB-W LED	EC1	DMX

## 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
- Maximum fixture weight is 15lbs - 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>Standard Tile</p> <p>Tegular 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>Standard Tile</p> <p>Tegular Tile</p>	<p><b>Screw Slot Mounting</b> Works with screw slot and bolt slot grid ceiling types.</p> <p>Tegular Tile</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>4-5/8" (117.6mm)</p>

## Voltage

- Some LUCEN configurations will not accommodate all voltage options; consult with factory
- 347 volt not available with Tunable White (TW) option

<b>U</b>	Universal
<b>1</b>	120 volt
<b>2</b>	277 volt
<b>3</b>	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

<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>	eldoLED Optotronic, 1%, 0-10v
<b>OL4</b>	eldoLED Optotronic 347v, 1% 0-10v, requires 347v
<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
<b>OL5</b>	eldoLED Optotronic 1%, 0-10v, AUX
<b>PL5</b>	Advance Xitanium 1%, 0-10v, AUX

### DALI Drivers

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

### Lutron Drivers

<b>LH1</b>	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1
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### Alternate Drivers

<b>PS1</b>	Advance Xitanium Step Dimming 50%/100%
<b>EH1</b>	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

<b>MOD</b>	Power Over Ethernet
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## 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

<b>1</b>	Single Circuit
<b>E</b>	Emergency Circuit only
<b>N</b>	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

<b>0</b>	No Battery
<b>FSB</b>	Factory Select Battery 10w, Integral Lithium
<b>FSBST</b>	Factory Select Battery 10w, Integral Lithium, Self Testing
<b>FSG</b>	Factory Select ALCR Emergency Control Device, UNV
<b>GI</b>	Iota ETS-DR, Emergency Control Device, UNV
<b>GB</b>	Bodine GTD, Emergency Control Device, 120v or 277v
<b>1ILL</b>	Iota 10w, Integral Lithium, Self Testing
<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: 1-1FSB
- Emergency circuit only, 10w integral battery      Ordering Code: E-1PLL

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### 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

<b>MOD</b>	Wood Grain
	Acoustic
	Metallic Silver
	Textured Black
	Bronze
	Graphite
Custom Color	

### Fixture Options

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

<b>QS</b>	Quick Ship
<b>TW</b>	Through-Wiring
<b>CP</b>	Chicago Plenum
<b>AM</b>	Antimicrobial Paint
<b>AR</b>	Air Return
<b>FW6</b>	Flex Whip 6'
<b>GLR</b>	Internal Fast Blow Fuse
<b>GMF</b>	Internal Slow Blow Fuse
<b>DSP</b>	Customer Supplied Battery/Driver/Sensor

### 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

<b>MOD</b>	Remote Driver
	End Power Feed

### Quick Ship

Shielding	Output	Mounting	Voltage	Driver	Circuiting	Battery	Finish	Options
<b>10-Day</b>								
<b>A</b> Satine Lens <b>W</b> White Rails <b>S</b> Silver Rails	80 CRI, All color temperatures, all lumen packages <i>See pg 4</i>	<b>G1</b> 1" Grid <b>G9</b> 9/16" Grid <b>GS</b> Screw Slot	<b>U1</b> Universal 120v <b>U2</b> 277v	<b>FSD</b> Factory Select Driver (1%, 0-10v)	<b>1</b> Single <b>E</b> Emergency <b>N</b> Night Light	<b>0</b> None <b>FSB</b> Factory Select Battery	<b>W</b> White	<b>CP</b> Chicago Plenum <b>FW6</b> Flex Whip 6' 18-gauge <b>GLR</b> Internal Fast-Blow Fuse

Consult Factory for projects that are larger than 200 units.

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## 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
<b>DLMFC</b>	Legrand Wattstopper DLM	LMFC-011	Digital Lighting Management (DLM)	Wired, two RJ45 ports	OL2, OL4	None
<b>DLMFS</b>	Legrand Wattstopper LLLC	LMFS-601-W / LMFI-111	Wireless DLM Fixture Sensor	Wireless	OD1, PR11 or 0-10v	0-10v requires interface
<b>EASYS</b>	Philips EasySense	SNS-210	Daylight/PIR Occupancy	Wireless to switches	PR1	Not available with 347 volt
<b>SNSLM</b>	Wattstopper PLUS SensiLUM	EN-CLM-PIR-DD-ZB	Encelium, Daylight/PIR Occupancy	Wireless	OD1, OL5	Not available with 347 volt
<b>WLX</b>	Eaton WaveLinx	SWPD1, MSP3IVMDC1	WaveLinx WCL, Daylight	Wireless	Any 0-10v	Not available with 347 volt
<b>VDO</b>	Lutron Vive Sensor	DFCSJ-OEM-OCC	Vive, Daylight/PIR Occupancy	Wireless	OD1, PR1	Not available with 347 volt
<b>VRF</b>	Lutron Vive Connected	DFCSJ-OEM-RF	Vive	Wireless	OD1, PR1	Not available with 347 volt

## Controls: MOD Options

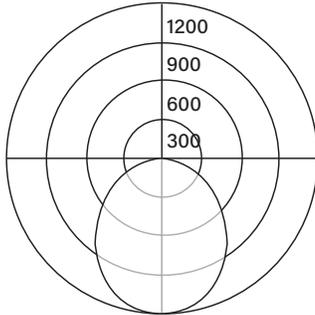
- Specify **MOD** in the part number for any of the below options
- Control** Options may require specific driver. Refer to the chart below
- Consult factory for **MOD** specification details, pricing, and lead-time information

MOD	Required Driver
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

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 or IAS accredited testing laboratory. Testing conducted at 25°C ambient conditions

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## 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. 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.

**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 = >102,000 hours, L90 = 60,600 hours. MacAdam 3-Step Ellipses. For all available IES files, please visit our website at [pinnacle-ltg.com](http://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. 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 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 109°F/43°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

**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:** 15 lbs maximum - Surface Mount Box adds 10 lbs.

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