



Whether you are looking to beautify or add a sense of security and well-being to your outdoor space, the highly configurable Hadco LED refractive post tops paired with the latest LumiLock light engine GX4 will definitely help you achieve your goals. A multitude of exterior luminaire styles allow you to create promenades and areas exuding timeless, historical charm both day and night. The configurable LED light engine GX4 is an ideal alternative to HID sources, providing you with significant energy savings, and more choices for light levels, optics and controls. Includes Service Tag, Hadco's innovative way to provide assistance throughout the life of the product.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

### Ordering guide

**Example: RL34 A A B A 1 A S N R7 W A 3 N N N N SP1**

Series	Pod	Roof	Cage	Finial	Fastener	Finish	Optic	Pod Photo Control (location inside of pod)
<b>RL34</b> Wide Body Type 3	<b>A</b> Octagonal style	<b>A</b> Victorian	<b>B</b> <sup>1</sup> Cage for wide body globe	<b>A</b>	<b>1</b> Hex head	<b>A</b> Black	<b>S</b> Short	<b>E</b> 120 VAC Button Eye
<b>RL54</b> Wide Body Type 5	<b>B</b> Round fitter with scalloped petals	<b>B</b> Acorn	<b>E</b> Band for wide body globe	<b>B</b>	<b>2</b> Allen head	<b>B</b> White	<b>W</b> Wide	<b>H</b> 208/240/277 Button Eye
	<b>H</b> Round contemporary	<b>C</b> Tall	<b>F</b> Band for wide body globe	<b>C</b> <sup>2</sup>		<b>G</b> Verde		<b>R</b> <sup>3</sup> 3 Pin Receptacle
	<b>L</b> Round fluted long	<b>D</b> Short	<b>G</b> <sup>1</sup> Cage for wide body globe	<b>D</b> <sup>2</sup>		<b>H</b> Bronze		<b>N</b> None
	<b>T</b> Decorative leaf with scalloped petals	<b>G</b> Adams	<b>I</b> <sup>1</sup> Cage for wide body globe	<b>E</b> <sup>2</sup>		<b>J</b> Green		
			<b>J</b> <sup>1</sup> Cage for wide body globe	<b>F</b>				
			<b>N</b> None	<b>G</b>				
				<b>H</b>				
				<b>N</b> None				

#### Optional programs

Future Proof Photo Control	Color Temp	Voltage	Drive Current	Integral Control Options	Option 1	Option 2	Option 3	Surge Protection
<b>R5</b> <sup>3,4</sup> 5 pin receptacle on the engine	<b>W</b> 3000K <b>N</b> 4000K	<b>A</b> 120-277 VAC <b>B</b> 347-480 VAC	<b>2</b> <sup>7</sup> 200mA <b>3</b> 350mA <b>4</b> 450mA <b>5</b> <sup>7</sup> 530mA	Dynadimmer <sup>5,8</sup> <b>DA</b> 4 Hrs 25% Reduction <b>DB</b> 4 Hrs 50% Reduction <b>DC</b> 4 Hrs 75% Reduction <b>DD</b> 6 Hrs 25% Reduction <b>DE</b> 6 Hrs 50% Reduction <b>DF</b> 6 Hrs 75% Reduction <b>DG</b> 8 Hrs 25% Reduction <b>DH</b> 8 Hrs 50% Reduction <b>DJ</b> 8 Hrs 75% Reduction <b>DL</b> <sup>5</sup> DALI <b>S</b> <sup>9</sup> FAWS Switch <b>N</b> None	<b>AST</b> <sup>5</sup> Adjustable start up time <b>N</b> None	<b>CLO</b> <sup>5</sup> Constant light output <b>N</b> None	<b>OTL</b> <sup>5</sup> Over the life <b>N</b> None	<b>SP1</b> 10kV/10kA Surge Protector <b>SP2</b> <sup>6</sup> 20kV/10kA Surge Protector
<b>R7</b> <sup>3,4</sup> 7 pin receptacle on the engine								
<b>N</b> None								

1 Not available with A pod.  
 2 Not available with B Roof.  
 3 Use of photoelectric cell (pod photo control (R) only) or shorting cap is required to ensure proper illumination. When R, R5, R7 options are selected, product will ship with shorting cap(s) installed.  
 4 Only available with A & B clear roof options. Not available with drive currents 4 or 5. RL 34 or 54 with S optic only available with A roof.  
 5 Optional Dynadimmer dimming schedules, DALI, AST, CLO, and OTL not available with 347-480 VAC.  
 6 When SP2 option is selected, luminaire will be fitted with SP2 instead of SP1.  
 7 Not available with B 347-480 voltage.  
 8 Not available with R5 or R7.  
 9 FAWS not available with CLO.



# RL34/RL54 Refractive Globe with Lumilock LED engine GX4

## Wide Body Type 3 – Acrylic Roof

Short

Wide

Catalog Logic	LED QTY	System Current (mA)	Color Temperature	Avg System Wattage <sup>1</sup> (W)	Lumen Output	Efficacy (Lm/W)	BUG rating	Lumen Output	Efficacy (Lm/W)	BUG rating
RL34-A-x-W-2	64	200	3000	39	5866	149	B2-U5-G3	5801	148	B2-U5-G3
RL34-A-x-W-3	64	350	3000	69	9900	143	B2-U5-G4	9789	142	B2-U5-G4
RL34-A-x-W-4	64	450	3000	88	12099	138	B3-U5-G5	11965	137	B3-U5-G4
RL34-A-x-W-5	64	530	3000	104	14060	135	B3-U5-G5	13903	133	B3-U5-G5

## Wide Body Type 3 – Metal Roof

Short

Wide

Catalog Logic	LED QTY	System Current (mA)	Color Temperature	Avg System Wattage <sup>1</sup> (W)	Lumen Output	Efficacy (Lm/W)	BUG rating	Lumen Output	Efficacy (Lm/W)	BUG rating
RL34-D-x-W-2	64	200	3000	39	3986	101	B1-U3-G3	3899	99	B1-U3-G3
RL34-D-x-W-3	64	350	3000	69	6725	97	B2-U4-G3	6583	95	B2-U3-G3
RL34-D-x-W-4	64	450	3000	88	8220	94	B2-U4-G4	8042	92	B2-U3-G4
RL34-D-x-W-5	64	530	3000	104	9553	92	B3-U4-G4	9352	90	B3-U4-G4

## Wide Body Type 5 – Acrylic Roof

Short

Wide

Catalog Logic	LED QTY	System Current (mA)	Color Temperature	Avg System Wattage <sup>1</sup> (W)	Lumen Output	Efficacy (Lm/W)	BUG rating	Lumen Output	Efficacy (Lm/W)	BUG rating
RL54-A-x-W-2	64	200	3000	39	5806	149	B2-U5-G3	5628	144	B3-U5-G2
RL54-A-x-W-3	64	350	3000	69	9755	142	B3-U5-G3	9604	140	B3-U5-G3
RL54-A-x-W-4	64	450	3000	87	11817	136	B3-U5-G4	11739	135	B4-U5-G3
RL54-A-x-W-5	64	530	3000	104	13743	133	B3-U5-G4	13659	132	B4-U5-G3

## Wide Body Type 5 – Metal Roof

Short

Wide

Catalog Logic	LED QTY	System Current (mA)	Color Temperature	Avg System Wattage <sup>1</sup> (W)	Lumen Output	Efficacy (Lm/W)	BUG rating	Lumen Output	Efficacy (Lm/W)	BUG rating
RL54-D-x-W-2	64	200	3000	39	4106	105	B2-U3-G2	3871	99	B3-U3-G2
RL54-D-x-W-3	64	350	3000	69	6697	98	B3-U4-G3	6534	95	B3-U3-G3
RL54-D-x-W-4	64	450	3000	87	8184	94	B3-U4-G3	7982	92	B3-U3-G3
RL54-D-x-W-5	64	530	3000	104	9462	91	B3-U4-G3	9281	89	B4-U4-G3

## Wide Body Type 3 – Acrylic Roof

Short

Wide

Catalog Logic	LED QTY	System Current (mA)	Color Temperature	Avg System Wattage <sup>1</sup> (W)	Lumen Output	Efficacy (Lm/W)	BUG rating	Lumen Output	Efficacy (Lm/W)	BUG rating
RL34-A-x-N-2	64	200	4000	39	6335	161	B2-U5-G3	6266	159	B2-U5-G3
RL34-A-x-N-3	64	350	4000	69	10696	155	B2-U5-G4	10577	153	B2-U5-G4
RL34-A-x-N-4	64	450	4000	88	13066	149	B3-U5-G5	12921	148	B3-U5-G5
RL34-A-x-N-5	64	530	4000	104	15194	146	B3-U5-G5	15026	144	B3-U5-G5

## Wide Body Type 3 – Metal Roof

Short

Wide

Catalog Logic	LED QTY	System Current (mA)	Color Temperature	Avg System Wattage <sup>1</sup> (W)	Lumen Output	Efficacy (Lm/W)	BUG rating	Lumen Output	Efficacy (Lm/W)	BUG rating
RL34-D-x-N-2	64	200	4000	39	4304	110	B1-U3-G3	4230	108	B2-U3-G3
RL34-D-x-N-3	64	350	4000	69	7268	105	B2-U4-G4	7141	103	B2-U3-G3
RL34-D-x-N-4	64	450	4000	88	8878	101	B3-U4-G4	8723	100	B3-U4-G4
RL34-D-x-N-5	64	530	4000	104	10322	99	B3-U5-G4	10143	97	B3-U4-G4

Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Philips.

Lumen output by optic type will vary slightly. See IES files and specification sheets when available. All technical data is subject to change.

Lumen values based on photometric tests performed in compliance with IESNA LM-79.

**Note:** Some data may be scaled based on tests of similar, but not identical, luminaires.

# RL34/RL54 Refractive Globe with Lumilock LED engine GX4

## Wide Body Type 5 - Acrylic Roof

### Short

### Wide

Catalog Logic	LED QTY	System Current (mA)	Color Temperature	Avg System Wattage <sup>1</sup> (W)	Lumen Output	Efficacy (Lm/W)	BUG rating	Lumen Output	Efficacy (Lm/W)	BUG rating
RL54-A-x-N-2	64	200	4000	39	6274	161	B3-U5-G3	6082	156	B3-U5-G2
RL54-A-x-N-3	64	350	4000	69	10542	154	B3-U5-G4	10379	152	B3-U5-G3
RL54-A-x-N-4	64	450	4000	87	12770	147	B3-U5-G4	12686	146	B4-U5-G3
RL54-A-x-N-5	64	530	4000	104	14852	143	B3-U5-G4	14760	142	B4-U5-G4

## Wide Body Type 5 - Metal Roof

### Short

### Wide

Catalog Logic	LED QTY	System Current (mA)	Color Temperature	Avg System Wattage <sup>1</sup> (W)	Lumen Output	Efficacy (Lm/W)	BUG rating	Lumen Output	Efficacy (Lm/W)	BUG rating
RL54-D-x-N-2	64	200	4000	39	4286	110	B2-U3-G2	4164	106	B3-U3-G2
RL54-D-x-N-3	64	350	4000	69	7236	105	B3-U4-G3	7030	102	B3-U3-G3
RL54-D-x-N-4	64	450	4000	87	8839	101	B3-U4-G3	8588	99	B4-U4-G3
RL54-D-x-N-5	64	530	4000	104	10279	99	B3-U4-G4	9986	96	B4-U4-G3

Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Hadco.

Lumen output by optic type will vary slightly. See IES files and specification sheets when available. All technical data is subject to change.

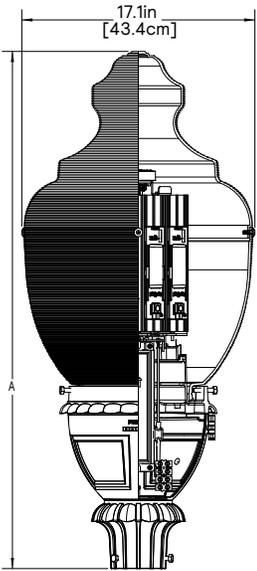
Lumen values based on photometric tests performed in compliance with IESNA LM-79.

**Note:** Some data may be scaled based on tests of similar, but not identical, luminaires.

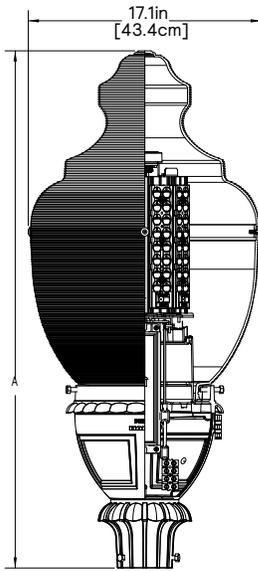
# RL34/RL54 Refractive Globe with Lumilock LED engine GX4

## Dimensions

### RL34 - Type 3

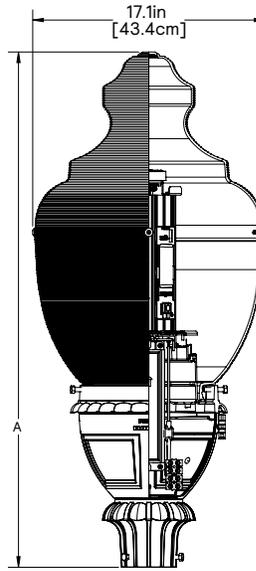


RL34BANNxxW configuration shown

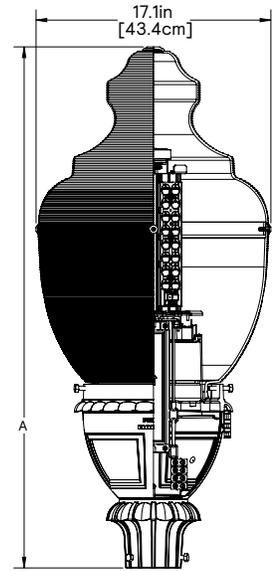


RL34BANNxxS configuration shown

### RL54 - Type 5



RL54BANNxxW configuration shown



RL54BANNxxS configuration shown

Roof	Dimension "A"	
	(in)	(cm)
A Victorian	37.9	96.3
B Acorn	34.4	87.3
C Tall	36.3	92.2
D Short	32.0	81.3
G Adams	35.7	90.7

EPA: 2.08 sq. ft. (Varies depending on options selected)  
Weight: 55lbs (maximum)

Dimensions will vary when other pod, cage and brim options are specified.  
See specification text on pages 5 and 6 for option dimensions.

## Housing Options

### Fitter/Pod Options



A Octagonal



B Round with Scalloped Petals



H Round Contemporary



L Round Fluted Long



T Decorative Leaf w/ Scalloped Petals

### Roof Options



A Victorian



B Acorn



C Tall



D Short



G Adams

### Cage/Band Options



B Cage for Wide Body Globe



E Band for Wide Body Globe



F Band for Wide Body Globe



G Cage for Wide Body Globe



I Cage for Wide Body Globe



J Cage for Wide Body Globe

### Finial Options



A



B



C



D



E



F



G



H

# RL34/RL54 Refractive Globe with Lumilock LED engine GX4

## Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours.

Driver mA	Optic	Ambient Temperature °C	Calculated L70 Hours	L70 per TM-21 (Hours)	Lumen Maintenance % at 60,000 hrs
530	Wide	25	>85,000	>60,000 hours	>88%
530	Short	25	>100,000	>54,000 hours	>98%
450	Wide	25	>100,000	>60,000 hours	>93%
450	Short	25	>100,000	>54,000 hours	>98%
350	Wide	25	>100,000	>60,000 hours	>94%
350	Short	25	>100,000	>54,000 hours	>98%
200	Wide	25	>100,000	>60,000 hours	>94%
200	Short	25	>100,000	>54,000 hours	>98%

## Field Adjustable Wattage (FAWS) Multiplier Chart

### All 350, 450, and 530 mA Configurations

FAWS Position	Typical Delivered Lumens Multiplier	Typical System wattage and typical current
1	0.30	0.28
2	0.53	0.48
3	0.62	0.56
4	0.73	0.67
5	0.78	0.73
6	0.83	0.78
7	0.87	0.85
8	0.91	0.89
9	0.95	0.93
10	1.00	1.00

### All 200mA Configurations

FAWS Position	Typical Delivered Lumens Multiplier	Typical System wattage and typical current
1	0.30	0.35
2	0.50	0.55
3	0.59	0.62
4	0.69	0.72
5	0.77	0.80
6	0.83	0.85
7	0.88	0.90
8	0.93	0.92
9	0.96	0.97
10	1.00	1.00

# RL34/RL54 Refractive Globe with Lumilock LED engine GX4

## Specifications

### Housing

#### Optional Pods:

**A:** Octagonal style fitter is constructed of die-cast 360 aluminum alloy with bottom-hinged door providing 135° entry into the fitter assembly for easy access to the electrical components. Accepts standard HADCO Twistlock ballast assemblies. Wiring block to accept three #8 solid or stranded wires. Optional internal twist-lock photo eye receptacle or optional button eye photocell. Easy access to photo eye through the door on the pod. Heavy cast aluminum post fitter utilizes four 5/16-18 black cadmium stainless steel set screws (Hex head or Allen head as specified) for mounting to 3" O.D. post tenon. Globe holder has an internal water trap to prevent water from entering ballast compartment. Globe is held by utilizing four 5/16-18 black cadmium stainless steel fasteners (Hex head or Allen head as specified). All hardware to be stainless steel and captive. Pod height is 10-3/4" and width is 10-1/4".

**B:** Round fitter with scalloped petals is constructed of die-cast 360 aluminum alloy with side-hinged door providing 180° entry into the fitter assembly for easy access to the electrical components. Accepts standard HADCO Twistlock ballast assemblies. Wiring block to accept three #8 solid or stranded wires. Optional internal twist-lock photo eye receptacle or optional button eye photocell. Easy access to photo eye through the door on the pod. Heavy cast aluminum post fitter utilizes four 5/16-18 black cadmium stainless steel set screws (Hex head or Allen head as specified) for mounting to 3" O.D. post tenon. Globe holder has an internal water trap to prevent water from entering ballast compartment. Globe is held by utilizing four 5/16-18 black cadmium stainless steel fasteners (Hex head or Allen head as specified). All hardware to be stainless steel and captive. Pod height is 12-1/4" and width is 11-1/2".

**H:** Round contemporary fitter is constructed of 356 HM High-Strength, Low-Copper cast aluminum. Accepts standard HADCO Twistlock ballast assemblies. Wiring block to accept three #8 solid or stranded wires. Optional internal twist-lock photo eye receptacle or optional internal button eye photocell. Easy access to photocell through tool-less door on pod. Heavy cast aluminum post fitter utilizes four 5/16-18 black cadmium stainless steel set screws (Hex head or Allen head as specified) for mounting to 3" O.D. post tenon. Globe holder has an internal water trap to prevent water from entering ballast compartment. Globe is held by utilizing four 5/16-18 black cadmium stainless steel fasteners (Hex head or Allen head as specified). All hardware to be stainless steel and captive. Pod height is 10" and width is 10".

**L:** Round fluted long fitter is constructed of 356 HM High-Strength, Low-Copper cast aluminum with a side-hinged door providing entry into the fitter assembly for easy access to the electrical components. Accepts standard Hadco Twistlock ballast assemblies. Wiring block to accept three #8 solid or stranded wires. Optional internal twist-lock photo eye receptacle or button eye photocell. Tool-less access to photo eye through the door on the pod. Heavy cast aluminum post fitter utilizes three 5/16-18 black cadmium stainless steel set screws (Hex head or Allen head as specified) for mounting to 3" O.D. post tenon. Globe holder has an internal water trap to prevent water from entering the ballast compartment. Globe is attached using four 5/16-18 black cadmium stainless steel fasteners (Hex head or Allen head as specified). Pod height is 12-1/2" and width is 10-3/4".

**T:** Decorative Leaf fitter with scalloped petals is constructed of 356 HM High-Strength, Low-Copper cast aluminum with side-hinged door providing 180° entry into the fitter assembly for easy access to the electrical components. Accepts standard HADCO Twistlock ballast assemblies. Wiring block to accept three #8 solid or stranded wires. Optional internal twist-lock photo eye receptacle or optional button eye photocell. Easy access to photo eye through the door on the pod. Heavy cast aluminum post fitter utilizes four 5/16-18 black cadmium stainless steel set screws (Hex head or Allen head as specified) for mounting to 3" O.D. post tenon. Globe holder has an internal water trap to prevent water from entering ballast compartment. Globe is held by utilizing four 5/16-18 black cadmium stainless steel fasteners (Hex head or Allen head as specified). All hardware to be stainless steel and captive. Pod height is 15-1/4" and width is 11-1/2".

### Roof

**A:** Victorian style roof is clear injection molded U.V. stabilized acrylic with 99 horizontal prisms for a soft, even glow. 13" height and 16-1/2" width. The roof and bottom globe sections are secured in a slip-fit, 1/2" overlap design and use four #10-24 stainless steel pan head screws with four aluminum nutserts providing a mechanical lock and enabling easy future replacement of either the roof or bottom globe section if required.

**B:** Acorn style roof is clear injection molded U.V. stabilized acrylic with 74 horizontal prisms for a soft, even glow. 9-1/2" height and 16-3/4" width. The roof and bottom globe sections are secured in a slip-fit, 1/2" overlap design and use four #10-24 stainless steel pan head screws with four aluminum nutserts providing a mechanical lock and enabling easy future replacement of either the roof or bottom globe section if required.

**C:** Roof is 0.060" thick spun aluminum. 12" height and 17" width. The roof and bottom globe sections are secured in a slip-fit, 1/2" overlap design and use four #10-24 stainless steel pan head screws with four aluminum nutserts providing a mechanical lock and enabling easy future replacement of either the roof or bottom globe section if required.

**D:** Roof is 0.090" thick spun aluminum. 8-1/2" height and 16-1/2" width. The roof and bottom globe sections are secured in a slip-fit, 1/2" overlap design and use four #10-24 stainless steel pan head screws with four aluminum nutserts providing a mechanical lock and enabling easy future replacement of either the roof or bottom globe section if required.

**G:** Roof is 0.080" thick spun aluminum. 10-1/2" height and 16-3/4" width. The roof and bottom globe sections are secured in a slip-fit, 1/2" overlap design and use four #10-24 stainless steel pan head screws with four aluminum nutserts providing a mechanical lock and enabling easy future replacement of either the roof or bottom globe section if required.

### Cage

**B:** Cage for Wide body globes (16-1/2" dia.) is constructed of die-cast 360 aluminum alloy. Cage has 4 legs each with square decorative flower block. Solid rectangular band around top of cage. Height of cage is 15" and width of cage is 20". Finish is polyester thermoset powdercoat. (NOTE : Cannot be used with "A" Pod.)

**E:** Band for Wide body globes (16-1/2" dia.) is architectural slotted aluminum. Supported at 4 points by cast aluminum square flower blocks. **F:** Band for Wide body globes (16-1/2" dia.) is architectural slotted aluminum supported at 4 points by cast aluminum round flower blocks.

**G:** Cage for Wide body globes (16-1/2" dia.) is constructed of 356 HM High-Strength, Low-Copper cast aluminum. Arched, decorative legs are welded to form a one-piece unit. Height of cage is 13" and width of cage is 18-1/2". (NOTE : Cannot be used with "A" Pod.)

**I:** Cage for Wide body globes (16-1/2" dia.) is constructed of 356 HM High-Strength, Low-Copper cast aluminum. Cage has 2 curved legs. Solid fluted band around top of cage. Height of cage is 14-1/2" and width of cage is 19-3/4". (NOTE: Cannot be used with "A" Pod.)

**J:** Cage for Wide body globes (16-1/2" dia.) is constructed of 356 HM High-Strength, Low-Copper cast aluminum. Cage has 4 curved legs. Solid fluted band around top of cage. Height of cage is 14-1/2" and width of cage is 19-3/4".. (NOTE : Cannot be used with "A" Pod.)

# RL34/RL54 Refractive Globe with Lumilock LED engine GX4

## Specifications (continued)

### Finials

All finials are cast aluminum mounted with 1/4–20 stainless steel threaded studs. Standard finial finish will match fixture finish as specified. Finish is thermoset powdercoat. (NOTE : C, D, and E finials are not available with "B" Roof.)

### Fasteners

Used to secure post fitter to post tenon and globe to globe holder.

1: Hex Head Bolts: Black cadmium stainless steel.

2: Allen Head Bolts: Black cadmium stainless steel.

### Light engine

GX4 is composed of four main components: Heat Sink, LED, Optical System, and Driver. Electrical components are RoHS compliant.

Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +40°C / +104°F. B Voltage configurations rated for operation in ambient temperature of -40°C / -40°F up to +35°C / +95°F.

### LED & Optics

Composed of 64 high power LEDs. LED board substrate is MCPCB (Metal Core Printed Circuit Board), designed to minimize thermal resistance from LED junction to heat sinks. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K+/- 275K or 3710K to 4260K) or Warm White, 3000 Kelvin nominal (3045K +/- 175K or 2870K to 3220K), CRI 70 Min. 75 Typical.

(W) Wide and (S) Short Optic choices are available. Both optics are made of optical grade PC and have been optimized to achieve maximum spacing, target lumens, and a superior lighting uniformity.

**Wide Optics** – Superior performance and light level uniformity for applications where typical pole spacing is approximately six times mounting height of luminaire.

**Short Optics** – Superior performance and light level uniformity for applications where typical pole spacing is approximately five times mounting height of luminaire. Provides higher illumination levels under pole area, ideal for increased security and applications requiring superior facial recognition.

Type 3 and Type 5 distribution choices are available.

LEDs and optics (S) Short or (W) Wide form an IP66 light engine to ensure complete environmental protection against water and dust ingress and corrosion, critical to long term LED reliability. All wiring is full copper, with 105C rated insulation. LED modules are secured to heatsinks using #8 stainless steel hardware, guaranteeing construction rigidity and vibration resistance.

### Heat sinks

LED Engine construction consists of four 6063-T5 aluminum heat sinks, clear anodized to MIL-A-8625 specifications for excellent corrosion resistance and surface finish. Fin spacing has been optimized for maximum convective heat transfer under natural convection conditions, maximizing LED life and efficiency. Heat sinks provide greater than 700 sq. in. of convective surface area total, ensuring proper junction temperature control, lumen maintenance, and system reliability. Extruded heatsinks meet or exceed tolerances as specified by AEC (Aluminum Extruders Council) standards and have been designed to provide superior surface flatness, ensuring excellent contact between heatsinks and LEDs. Product does not use any cooling device with moving parts (passive cooling only).

Heat sinks are secured using galvanized steel brackets and stainless steel hardware to provide additional corrosion resistance.

### Globe Assembly

Wide body globe is constructed of clear injection-molded U.V. stabilized acrylic. A two-piece (Globe and Roof) slipfit, 1/2" overlap, design utilizes nutserts and stainless steel fasteners, which eliminates a "butt-glue" seam appearance. The optical section of the globe has a neck opening of 7-3/8" and an outside neck diameter of 8". Globe (less the roof) has a 12-7/8" height and 16-3/4" width at the top with 98 horizontal prisms and 360 highly polished vertical prisms.

### Driver

Driver comes standard with 0–10V dimming capability. High power factor of 95%. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. Driver operating ambient temperature range is -40F (-40C) to +130F (+55C). Certified in compliance to UL1310 cULus requirement (dry and damp location). Assembled on a LumiLock twistlock removable cover with Tyco quick disconnect plug resisting to 221°F (105°C). The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

### Driver Options

**AST:** Pre-set driver for progressive start-up of the LED module(s) to optimize energy management and enhance visual comfort at start-up.

**CLO:** Pre-set driver to manage the lumen depreciation by adjusting the power given to the LEDs offering the same lighting intensity during the entire lifespan of the LED module.

**OTL:** Pre-set driver to signal end of life of the LED module(s) for better fixture management.

### Dimming Options

**DA:** 4 Hrs 25% Reduction

**DB:** 4 Hrs 50% Reduction

**DC:** 4 Hrs 75% Reduction

**DD:** 6 Hrs 25% Reduction

**DE:** 6 Hrs 50% Reduction

**DF:** 6 Hrs 75% Reduction

**DG:** 8 Hrs 25% Reduction

**DH:** 8 Hrs 50% Reduction

**DJ:** 8 Hrs 75% Reduction

**DALI:** Pre-set driver compatible with DALI logarithmic control system.

### FAWS

Field Adjustable Wattage Selector, pre-set to the highest position, can be easily switched in the field to the required position. This reduces total luminaire wattage consumption and reduces the light level – see the FAWS multiplier chart for more details.

**Note:** It is not recommended to use FAWS with other dimming or controls; if you do, set the switch to position 10 (maximum output) to enable the other dimming or controls. Switching FAWS to any position other than 10 will disable the other dimming or controls.

### Future Proof Photo Control Options

**R5** – Receptacle with 5 pins enabling dimming. Can be used with a twist lock node or a shorting cap. Will ship with a shorting cap installed for this product. Remove shorting cap when you are ready to install your node.

**R7** – Receptacle with 7 pins enabling dimming and additional functionality (to be determined). Can be used with a twist lock node or a shorting cap. Will ship with a shorting cap installed for this product. Remove shorting cap when you are ready to install your node.

# RL34/RL54 Refractive Globe with Lumilock LED engine GX4

## Specifications (continued)

Scenarios	Pod Photo Control Options	Future Proof Photo Control Options
Scenario 1: Basic Level of Controls only	Choose E, H or R options	Choose None
Scenario 2: Network Control Solutions are being used immediately on this project	Choose None	Choose R5 or R7 (will ship with a shorting cap for you to remove and replace with your node)
Scenario 3: You would like the product to be future proof because one day you will use a networked lighting controls system. You also require the use of a basic photo control system now to turn your lights on and off	Choose E, H or R depending on your requirements	Choose R5 or R7 (will ship with a shorting cap for you to remove and replace with your node, then move the shorting cap to the pod receptacle). If you used a button eye, disconnect the button eye.

### Surge Protection

Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA. Option for SP2 20kV/10kA.

### Finish

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils / 24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

### Luminaire Useful Life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, using LM-80 data from LED manufacturers and engineering prediction methods, the luminaire useful life is expected to reach 100,000+ hours with >L70 lumen maintenance @ 25°C. 530mA configurations with short optics expected to reach 95,000+ hours with >L70 lumen maintenance @ 25C. 530mA configurations with wide optics expected to reach >75,000 hours with >L70 lumen maintenance @ 25C.

Luminaire useful life accounts for LED lumen maintenance and additional factors, including LED life, driver life, PCB substrate, solder joints on/off cycles and burning hours for nominal applications. Lifetime statements do not include the use of controls, including networked controllers.

### LED products manufacturing standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340 5 1 and ANSI/ ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

### Quality Control

The manufacturer must provide a written confirmation of its ISO 9001 2008 and ISO 14001 2004 International Quality Standards Certification.

### Vibration Resistance

Meets the ANSI C136.31 2001, American National Standard for Roadway Luminaire Vibration specifications for Normal Applications.

### Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed inside the luminaire, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away.

For more details visit: [philips.com/servicetag](http://philips.com/servicetag)

### Certifications and Compliance

cETL listed to Canadian safety standards for wet locations. Manufactured to ISO 9001:2008 Standards. UL8750 and UL1598 compliant. ETL listed to U.S. safety standards for wet locations. LM80 & LM79 tested. IP Rating: IP66 sealed light engine. The LED driver is IP66 rated. LED luminaires are Design Lights Consortium qualified.

### Warranty

5 year extended warranty.

See [signify.com/warranties](http://signify.com/warranties) for details and restrictions.

