

# luxrail™

## INTERIOR/EXTERIOR APPLICATIONS

### Application

ANSI and ADA compliant, **luxrail** is an indoor/outdoor LED-based handrail that delivers functional illumination. Two intensities may be specified: standard output and high output. The standard light output version delivers illuminance levels appropriate for exterior applications (2 footcandles at grade) as well as for dark interior environments with low ambient illumination levels (e.g., themed environments, theatres and residential areas). The high output version delivers illuminance levels applicable to interior environments – providing in excess of 10 footcandles along the path of egress (ANSI required for stair treads). Independent photometric test reports and IES Format data are available at [www.cooperlighting.com](http://www.cooperlighting.com).

**luxrail**'s standard handrail gripping surfaces are circular in cross section and meet 2004 ADAAG (Americans with Disability Act Accessibility Guidelines). Patented optical assemblies deliver 10°, 25° and 55° beam spreads, as well as an asymmetric option. The 25° and 55° beam patterns are most suitable for illuminating pathways, while the 10° beam spread offers accent lighting for optional glass or stainless steel cable railing infills. Projected average rated life is 50,000 hours at 70% of lamp lumen output. Contact factory for IES LM-80 compliance. To ensure proper performance, architectural details should allow for ventilation and air flow around the fixture. Ambient temperature surrounding the fixture shall not exceed 122°F (50°C).

### Light Output

Two luminous intensities are available for white light. All values below represent the initial raw lumens of the LED. IES format photometry of Lighting Facts labels represent actual light output measured in lumens and candle power. Light output losses include optical, thermal and power supply inefficiencies. IES LM-79 format files may be obtained from the factory or downloaded from [www.cooperlighting.com](http://www.cooperlighting.com). Results are typical measurements. For 90+ CRI, please consult factory for pricing and availability.

	Standard Output	High Output
<b>Initial Lumens</b>		
2700K White:	72 lms/ft	253 lms/ft
3000K White:	81 lms/ft	284 lms/ft
3500K White:	83 lms/ft	289 lms/ft
4000K White:	88 lms/ft	307 lms/ft

Non-standard color temperatures available as a custom offering for a modest additional cost and lead-time.

### Construction

**luxrail** may be post mounted or wall mounted. **io** recommends installation be completed by a qualified handrail installer. Mounting hardware (post or wall) is typically required up to 5' O.C., depending on the handrail alloy. Final post and wall bracket spacing must be determined by a licensed architect or structural engineer. **luxrail** is available in stainless steel and aluminum. Vandal resistant access chamber allows units to be removed for maintenance purposes. The LED light fixture inside the caprail is UL Listed for wet locations. Contact factory for maintenance guidelines.

All handrail component parts are engineered for quick installation. Field welding or cutting is typically not required. All parts are prefabricated to field dimensions and are assembled in the field with mechanical connection or epoxy. Contact **io** Lighting for recommended handrail installers.

### Electrical

**luxrail** houses a low voltage LED-based light fixture that is integrated into the underside of the handrail. 24 volt 100 watt power supplies are provided as a standard. For detailed information regarding daisy chain limitations, remote distance limitations, power supply options, and dimming options consult Eaton's Cooper Lighting website ([www.cooperlighting.com](http://www.cooperlighting.com)) or an **io** representative.

#### Driver Remote Distance

7'-0" (2.1m) w/22 AWG
18'-0" (5.5m) w/18 AWG
46'-0" (14.0m) w/14 AWG
71'-0" (21.6m) w/12 AWG

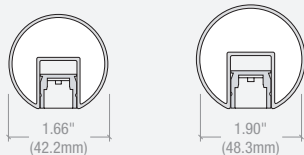
Dimming modules must be specified separately. For detailed information download the power supply specification sheet from [www.cooperlighting.com](http://www.cooperlighting.com).

### Power Consumption

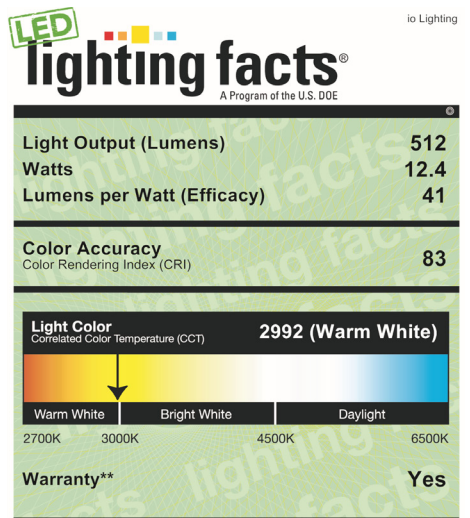
Power consumption does not include power supply losses.

Standard Output	High Output
1.02 w/ft	3.81 w/ft

### Dimensions



1-year warranty



All results, except LED Lumen Maintenance, are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

\*\* See [www.lightingfacts.com/products](http://www.lightingfacts.com/products) for details.

Registration Number: PNE4-KCVQNN (7/11/2013)

Model Number: 0.031.3KHO.55.1.06.2

Type: Outdoor path/step/rail light

Label references 36" **luxrail** fixture with a 55° beam spread in High Output 3000K. Lighting Facts for additional beam spreads and light output levels may be obtained from **io** Lighting.

## Light Output / Distributions



**io Lighting** recommends a qualified handrail installer be on site during install.

	Standard Output	High Output
2700K White	0.25 <sup>(1)</sup>	0.94 <sup>(1)</sup>
3000K White	0.27 <sup>(1)</sup>	1.00 <sup>(1)</sup>
3500K White	0.29 <sup>(1)</sup>	1.06 <sup>(1)</sup>
4000K White	0.29 <sup>(1)</sup>	1.06 <sup>(1)</sup>

Note: Visit [www.iolighting.com](http://www.iolighting.com)  
or contact an **io** representative for  
IES format photometrics.

## Mounting / Infill Options



**11.** CE Available upon request.

## Footnotes

1. **Power Supply Specification Sheet** may be downloaded from [www.oliighting.com](http://www.oliighting.com).
2. Each handrail application will be custom to accommodate varying field conditions and design requirements. Shop drawings will be required to manage specifics of each handrail section.
3. White light variance between LEDs is equal to or better than 3-step MacAdam Binning.
4. Stainless Steel cable available for flat surfaces only.
5. Detailed elevation drawings of handrail section are required for quote.
6. Non-standard color temperature and CRI are available. Consult factory for availability.



**You Tube**

**luxrail** applications  
*youtube.com/iolighting*