

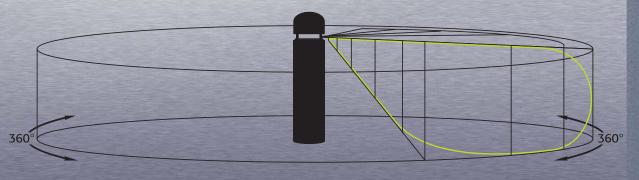
# OPTX - PRECISION GUIDED LIGHTING TECHNOLOGY

Based on the principles of highly classified missile defense research used to guide missiles with pinpoint accuracy, OptX<sup>®</sup> is the heart of the Hyperion Bollard Series. This patented optics technology directs light onto usable planes effectively, efficiently, and precisely where you want it.

HYPERION with OptX offers a sophisticated design edge while delivering exceptional illuminance levels over greater distances, providing a transitional area between indoor and outdoor lighting systems.







OptX provides precise lighting control and illuminance levels over greater distances than any other bollard.



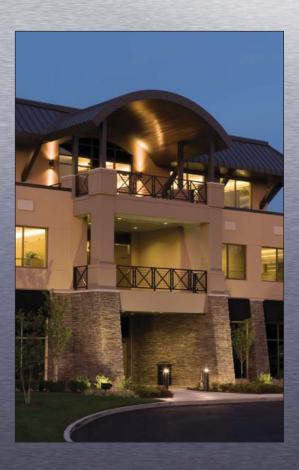
The Hyperion can be ordered with a black lens protector. This design option makes the Hyperion top appear as if it is floating.

### HYPERION - SOPHISTICATED STYLE AND PERFORMANCE

Unlike any other bollard, the Hyperion provides for the comfortable and natural adjustment of the human eye as the lighting environment changes. The benefits are improved visibility, safety, and enhanced architectural integrity. A blend of contemporary and classic bollard design, with an incredible optical performance twist, the architecturally refined HYPERION results in:

- Extended spacing between luminaires reducing the number of fixtures required, and lowering purchase, installation, and operating costs
- Extremely uniform Illuminance between luminaires
- Improved visibility
- Enhanced sense of security, which increases pedestrian traffic
- Improved wayfinding and hazard avoidance
- Unmatched vandal resistance







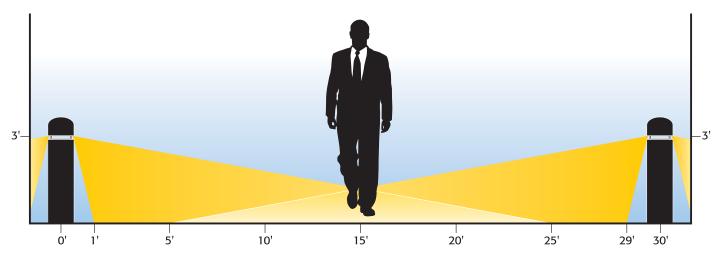
# HYPERION BOLLARD SERIES - LEADING EDGE PERFORMANCE

Superior optical performance is the point of distinction between Hyperion with OptX and standard bollards. Although impressive in appearance, leading-edge optics technology and performance is what truly separates the Hyperion Series from other bollards. Specifiers, for the first time, can now select a fixture based on performance and appearance, rather than on appearance alone.

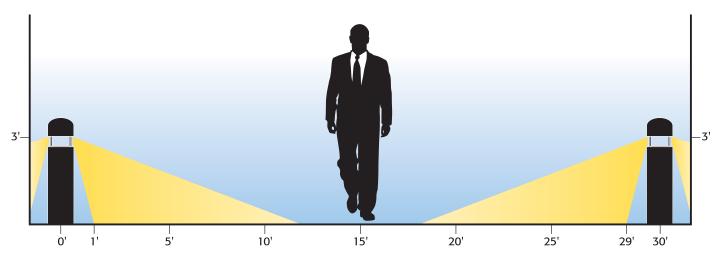
### HYPERION WITH OPTX VS. STANDARD BOLLARD ILLUMINATION

### Hyperion with OptX delivers incomparable performance advantages over standard bollards:

- Luminaires can be placed further apart than any other bollard on the market. Increased spacing means fewer fixtures as well as lower ownership and operating costs, while achieving optimal performance
- Tailored, uniform distribution over greater distances
- Superior horizontal throw and illuminance levels
- 96% reflectance of optical components provides energy efficient operation



**Hyperion with OptX –** Light ray from small aperture reaches grade 25 feet away



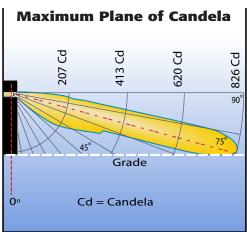
**Standard Bollards –** Light ray from large conventional apertures reaches grade an average of 12 feet away

# COMMUNITY-FRIENDLY DISTRIBUTION

The Hyperion OptX precision-guided optical system provides higher illuminance levels without using a large aperture or refractor that compromises the nighttime sky.

- OptX uses Constructive Occlusion<sup>®</sup> to distribute visible energy. A Cavity and Fan™ arrangement projects radiant energy from a precisely positioned lamp into selective zones.
- Hyperion provides vertical illuminance, required for the recognition of facial features, yet no light is directly projected above the horizontal.



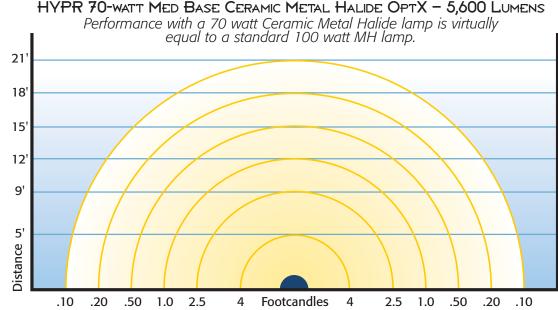


Impressively detailed buildings demand a luminaire that complements and enhances the architectural statement, in the daylight as well as in the night. Finely detailed form, flawless material transition, and quality construction are just the beginning of the differentiating aspects of Hyperion.

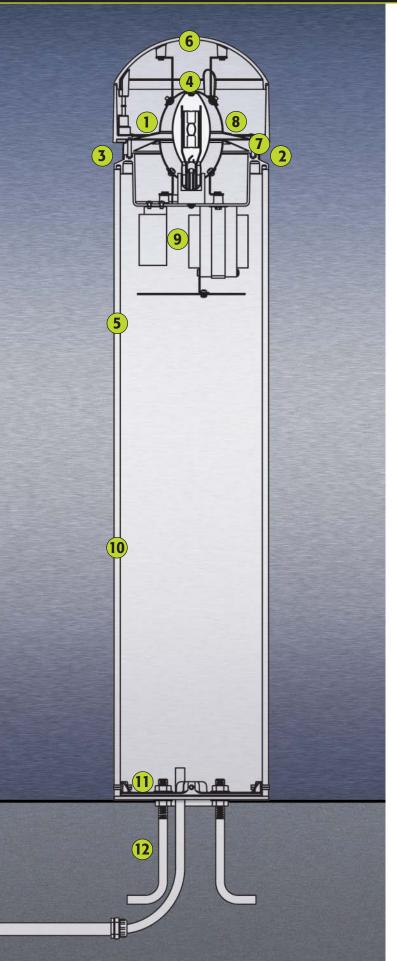
### PHOTOMETRIC PERFORMANCE - THE DIFFERENCE IS IN THE OPTX

- The Hyperion Bollard Series performs both day and night with uncompromising attention to form and function. Truly remarkable photometric performance allows the Hyperion Series the distinction of being in a class by itself.
- Complete Hyperion photometry is available at www.lsi-industries.com





### INTELLIGENT CONSTRUCTION



Bollards are subjected to extreme environments – from severe weather to pedestrian wear-and-tear to senseless vandalism.

The Hyperion Bollard Series was designed with this harsh reality in mind, and that's why it features materials that are of the highest quality. Its superior vandal resistant construction makes it rugged, durable, and dependable.

- 1 Optics OptX optics are the heart of this luminaire. A clear lamp is precisely positioned in a highly engineered, and patented, Cavity and Fan assembly that functions like an integrating sphere. Known as Constructive Occlusion technology, this sphere uses a proprietary internal coating that realizes 96% reflectance. The lamp's radiant energy is distributed by this finely tuned, reflective surface to desired zones.
- **2** Vandal Resistant Aperture Hyperion features the narrowest aperture of any bollard on the market, a mere 1.167" wide, which gives the luminaire a sleek and elegant appearance while minimizing the target area available to vandals.
- **3 Vandal Resistant Lens –** The one-piece, heavy-wall borosilicate lens is recessed a full .764" and is protected by three cast ribs. The exposed portion of the lens is only .671" tall. These design features and premium materials provide superior vandal resistance.
- 4 Lamps Standard and Ceramic Metal Halide
- **5 Heavy-Wall Housing –** One-piece, heavy-wall extruded aluminum, .322" thick for vandal resistance.
- **6 Crown** Flat or domed heavy-wall cast aluminum. One-piece castings provide for greater impact strength.
- **7 Concealed Access** Added security against vandals, crown attaches to lower housing with four captive, concealed 1/4" x 20 Allen-head screws.
- **8 Sealing and Gaskets** Silicone gaskets and seals ensure Hyperion is as dependable as it is rugged.
- **9 Ballasts** Standard ballast is high power factor, designed for -20° operation. Universal electronic ballast available.
- **10 Finishes** Metallic Silver, Graphite, Buff, Satin Verde Green, Black, Bronze, White or Platinum Plus polyester powder coating.
- **Mounting Base** Extra thick, 1/2" cast Almag (Aluminum Magnesium Alloy) base is extremely corrosion resistant and durable.
- **12 Anchor Bolts** 3/8" x 10" heavy-duty galvanized steel; four (4) furnished.

### ORDERING GUIDE: HYPERION BOLLARD SERIES WITH OPTX

TYPICAL ORDER EXAMPLE: HYPR 100MH MT OPTX MSV FT H42 PC120

Luminaire Prefix	Wattage/ Lamp Type ¹	Line Voltage	Optics	Luminaire Finish	Тор	Height <sup>3</sup>	Options
HYPR	50, 70, 100 MH E-17 Medium Base Metal Halide Quartz Arc Tube  50, 70, 100 CMH/Med E-17 Medium Base Metal Halide Ceramic Arc Tube  39, 70 CMH/T6 T-6 Ceramic MetalHalide with	480 <sup>2</sup> MT - Multi Tap TT - Tri-Tap UE - Universal Electronic (120-277V 50/60Hz) 347 (60Hz)	OptX®	BRZ – Bronze BLK – Black PLP – Platinum Plus BUF – Buff WHT – White SVG - Satin Verde Green GPT - Graphite MSV - Metallic Silver	FT – Flat Top DT – Dome Top	H42	PC120 – 120 Volt Photocell PCHV – 208- 277V Photocell PC347 – 347V Photocell GFR – Ground-Fault Receptacle LPC - BLK Lens Protector casting painted black LL - Less Lamp LAB - Less Anchor Bolts  Accessories
	G12 Bi-pin base	Consult Factory for International Voltages	MT – Multi Tap (120V, 208V, 240V, and 277V) is shipped standard unless otherwise specified, and is pre-wired for highest voltage. Alternate voltages will require field re-wiring.  TT – Tri-Tap (120V, 277V, and 347V) is shipped standard for Canadian applications, and is pre-wired for highest voltage. Alternate voltages will require field re-wiring.				HSS - House Side Shield 4

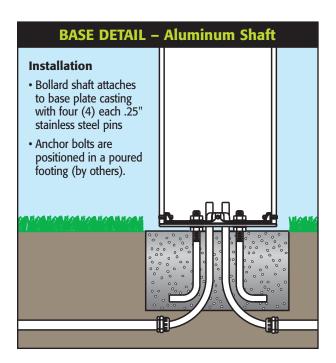
#### FOOTNOTES:

- 1. All Hyperion Bollards are shipped with lamps installed and 38" leads to facilitate wiring.
- 2. 480 volt Magnetic Ballast is available for 70 and 100 Watt Metal Halide only.
- 3. Nominal standard height if 42". Non-Standard heights are available in 6" increments. Minimum height is 18"
- 4. House Side Shield provides 180º shielding. Maximum fixture rating with HSS is 70 watts. HSS is NOT available for 100 watt fixtures.



# Hyperion Bollards Are Designed For Easy Installation

All Hyperion Bollards are shipped with lamps installed and extended supply leads. The fixtures do not require contractor assembly, speeding installation.



### **D**IMENSIONS

Bolt

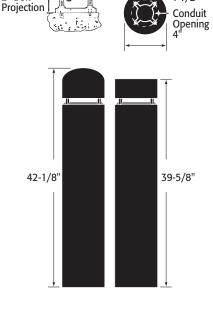
Circle

4 1/2"

**Anchor Bolt** 

3/8" X 10"

2" Bolt



#### **FINISHES**

Each fixture is finished with LSI's DuraGrip<sup>®</sup> polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years.







### LSI LIGHTING SOLUTIONS PLUS

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