

## LumaCrete Q3D Concrete Printed Bollards

The LumaCrete Q3D Printed Concrete Bollards family consists of four unique, durable concrete form designs in a choice of four colors and ten luminaire head selections. Heads are available in a variety of semi-cutoff and luminous white lens options. LED technology provides controlled optical performance and high energy efficiency. The concrete body provides long term durability and vandal resistance. These fixtures are ideal for retail centers, industrial parks, schools and universities, public transit and airports, office buildings and medical facilities.

### Specifications and Features:

#### Housing:

**Concrete Bollard Shaft:** The concrete shaft is 3D printed using high strength modified cement based micro concrete with selected aggregates and additives utilizing unique continuous layers for a unique design appearance.

**Bollard Luminaire Heads:** Cast Aluminum Housing with Flush Mounting Base & Vandal-Resistant Screws, Internal Driver Tray for Easy Maintenance.

#### Listing & Ratings:

ETL: Listed for Wet Locations, ANSI/UL 1598, 8750; IP65 (H1, HB1, & HB10) & IP66 (Legacy Bollards) Sealed LED Compartment.

#### Finish:

Textured Architectural Bronze or Black Powdercoat Finish Over a Chromate Conversion Coating for Bollard Heads, Exterior Concrete Stains For Shaft. Custom Colors Available Upon Request.

#### Style:

Clear Prismatic Borosilicate Glass Refractor, Specially Designed Cone Reflector or Internal Louvers

#### Lens:

Clear UV-Stabilized Polycarbonate Vandal-Resistant Lens or SoftLED LumaLens UV-Stabilized Polycarbonate Opal Vandal-Resistant Lens.

#### Mounting Options:

Steel 1/2" Base Plate With 1/2"x 12" Galvanized Steel Anchor Bolts.

#### EasyLED LED:

Aluminum Boards

#### Driver:

Electronic Driver, 120-277V, 50/60Hz or 347V, 50/60Hz (15w Only); Less Than 20% THD and PF>0.90. Standard Internal Surge Protection 2kV. 0-10V Dimming Standard for a Dimming Range of 100% to 10%; Dimming Source Current is 150 Microamps.

#### Warranty:

5-Year Warranty for -40°C to +40°C Environment.

See Page 6 for Projected Lumen Maintenance Table.



**7001CBRBKSHLQ**  
Round Concrete Printed  
Bollard with Black Stain  
and Round Dome Bollard  
with Louvers



**7001CBTBZSH1Q**  
Twist Concrete Printed  
Bollard with Bronze Stain  
and Round Beveled Flat  
Bollard with Louvers



**7001CBFRBZSHRLQGSZ**  
Flair Rope Concrete Printed  
Bollard with Bronze Stain  
and Round Beveled Flat  
Bollard with LED Cone  
Reflector

### Project Information:

Project Name:	Fixture Type:
Complete Catalog #:	Date:
Comments:	

### Certification & Listings:



**H1Q, H1BQ  
H10BQ**

**Legacy  
Bollards**

## LumaCrete Q3D Concrete Printed Bollards

### Concrete Form Selection



### Bollard Head Selection



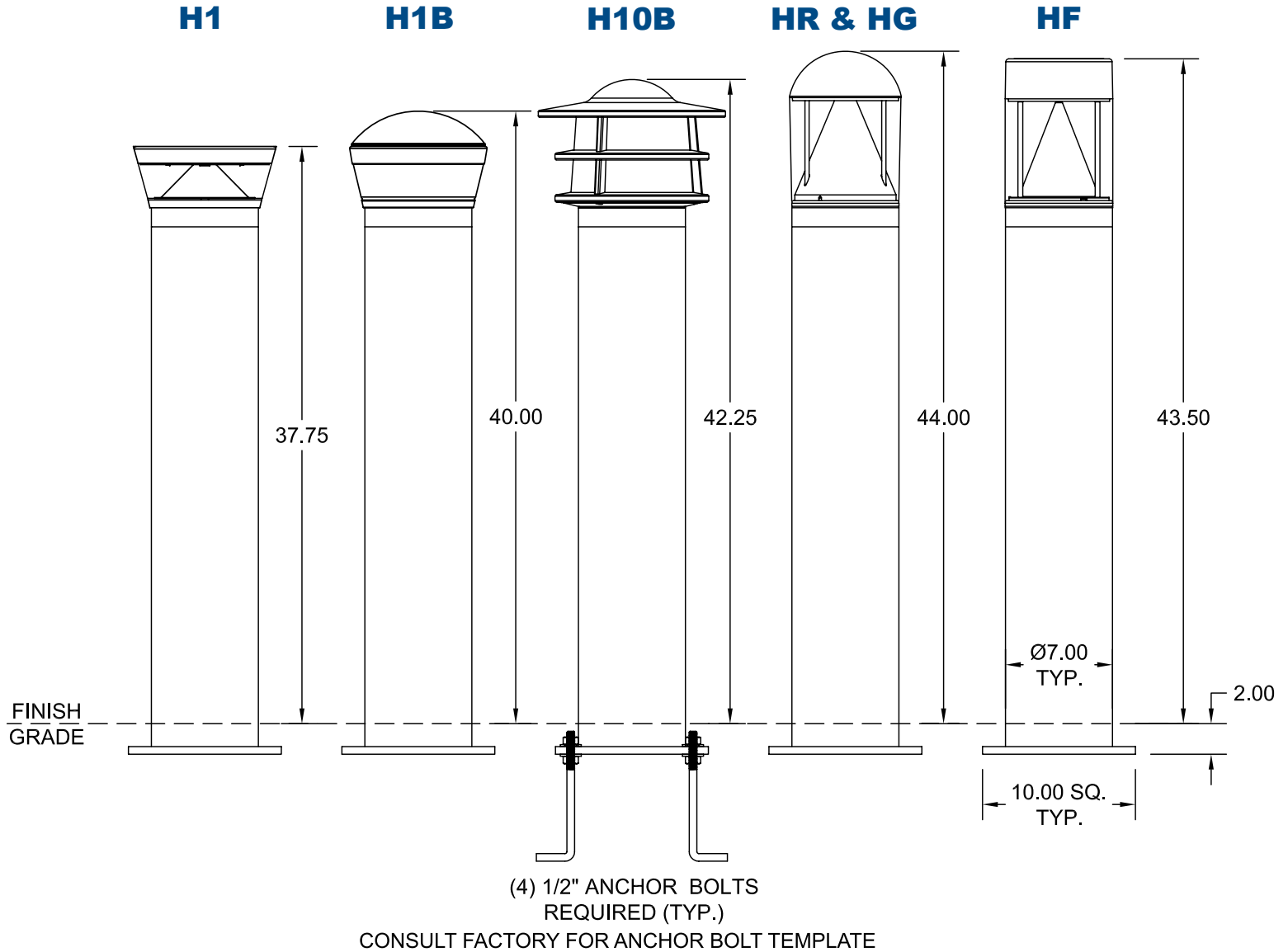
### Order Information Example:

7001CBFRBZSHRLQGSZ

7001CB											
Model	Concrete Form	Concrete Color	Bollard Head	Optics	Wattage	Driver	CCT	Lens	Head Finish	Options	
7001CB = Concrete Printed Bollard  7" O.D.	R=Round T=Twist F=Flare FR=Flare Rope	BZS=Bronze Concrete Stain BKS=Black Concrete Stain SVS=Silver Concrete Stain WHS=White Concrete Stain	H1=Round Flat Beveled H1B=Round Dome Beveled	F=Type V	1X16=16w 1X23=23w 1X34=34w	U=120-277V	3K=3000K 4K=4000K 5K=5000K	C=Clear Lens L=SoftLED LumaLens Opal UV-Stabilized Polycarbonate Array Lens*  *Type V Only	Z=Bronze B=Black C=Custom (Consult Factory)	SF=Single Fuse DF=Double Fuse SP=Surge Protection GSZ=180° Glare Shield, Bronze GSC=180° Glare Shield, Custom Color (Consult Factory)*	
			H10B=Lighthouse Bollard	F=Type V	1X10=10w 1X19=19w 1X28=28w					*Not available for H1, H1B, and H10B Bollard Heads  Note: Consult Factory for Anti-Graffiti Finish	
			HRW=Round Dome Legacy Bollard White Cone Reflector HRL=Round Dome Legacy Bollard with LED Cone Reflector HG=Round Dome Legacy Bollard with Glass HL=Round Dome Legacy Bollard with Louvers	C=Type III* F=Type V  *Not available on HL Head	1X10=10w 1X15=15w 1X22=22w						
			HFRW=Round Flat Top Legacy Bollard White Cone Reflector HFRL=Round Flat Top Legacy Bollard with LED Cone Reflector HFG=Round Flat Top Legacy Bollard with Glass HFL=Round Flat Top Legacy Bollard with Louvers	C=Type III* F=Type V  *Not available on HFL Head	1X10=10w 1X15=15w 1X22=22w						

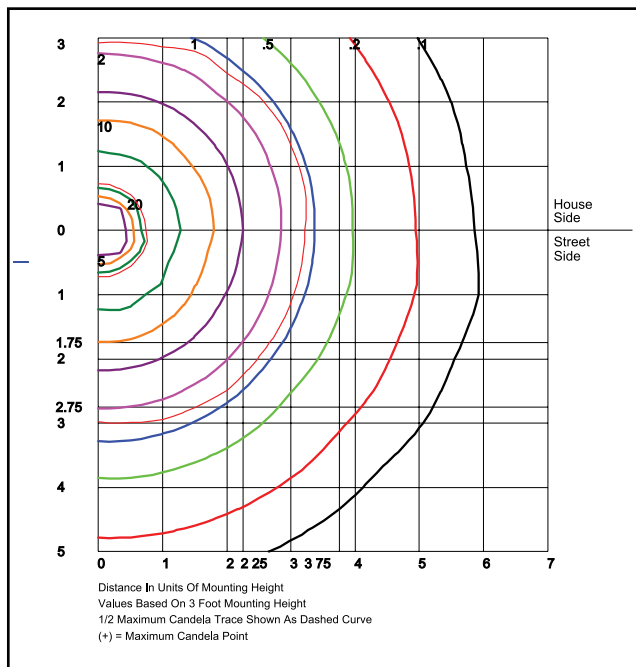
**LumaCrete Q3D Concrete Printed Bollards**

**Dimensions**



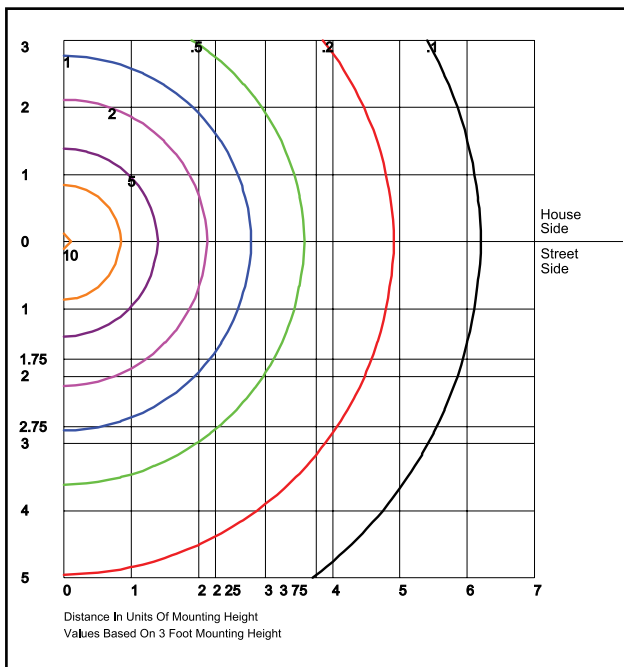
**LumaCrete Q3D Concrete Printed Bollards**

**Photometric Data**



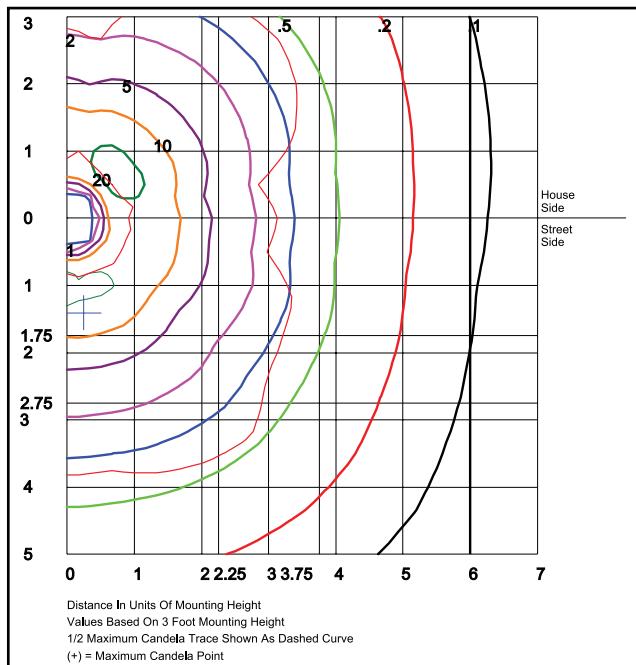
**H1 Round Flat Beveled & H1B Round Dome Beveled  
Type V, Clear Lens**

Grid in feet, Mounting Height = 3 ft.



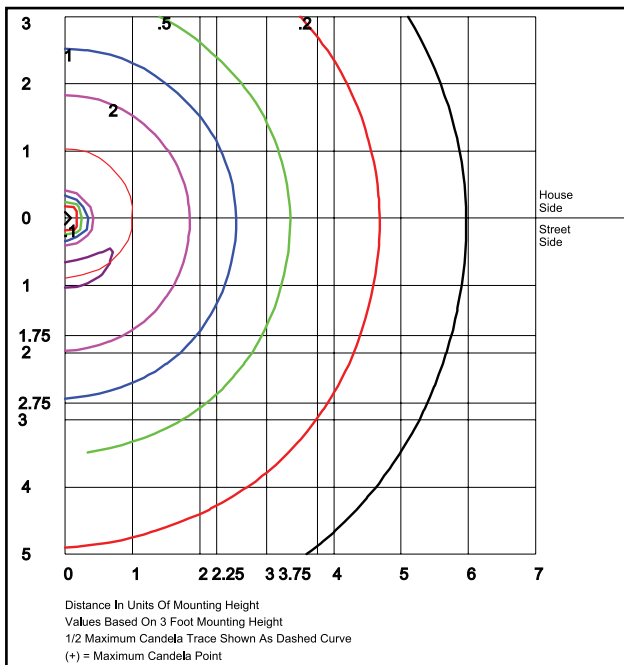
**H1 Round Flat Beveled & H1B Round Dome Beveled  
Type V, LumaLens**

Grid in feet, Mounting Height = 3 ft.



**H10 Lighthouse Bollard  
Type V, Clear Lens**

Grid in feet, Mounting Height = 3 ft.

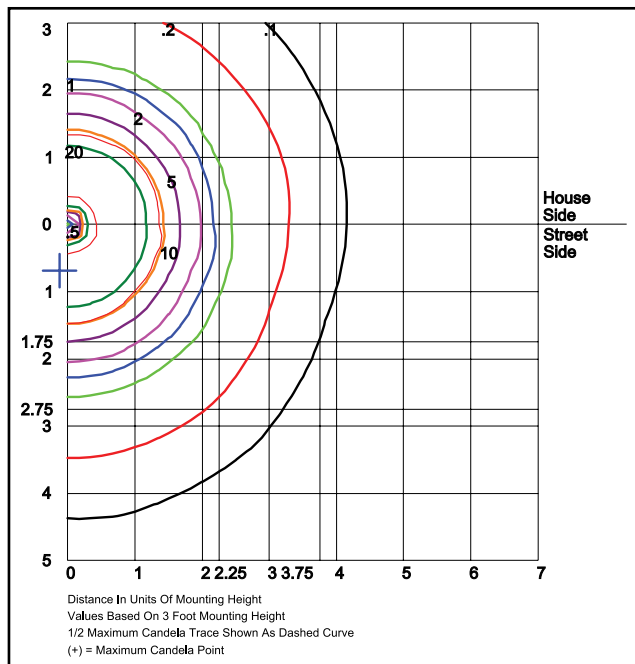


**H10 Lighthouse Bollard  
Type V, LumaLens**

Grid in feet, Mounting Height = 3 ft.

## LumaCrete Q3D Concrete Printed Bollards

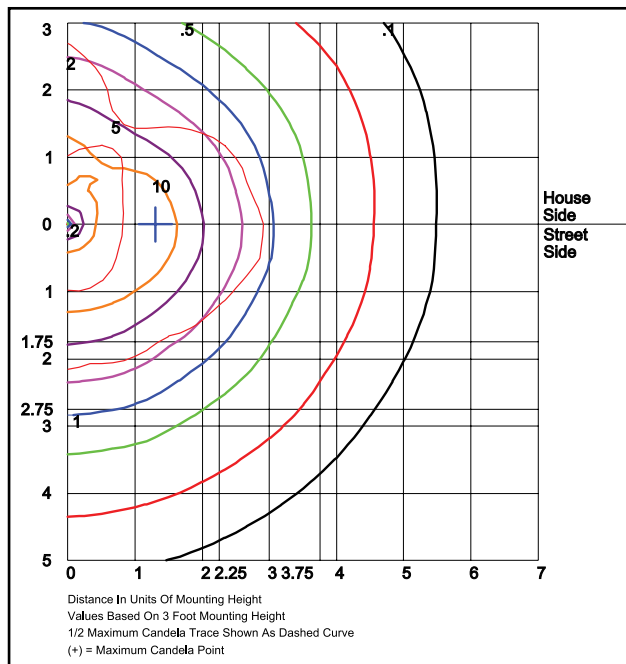
### Photometric Data



**HRW & HFRW Round Dome and Flat Top Bollard LED Reflector**

**Type V**

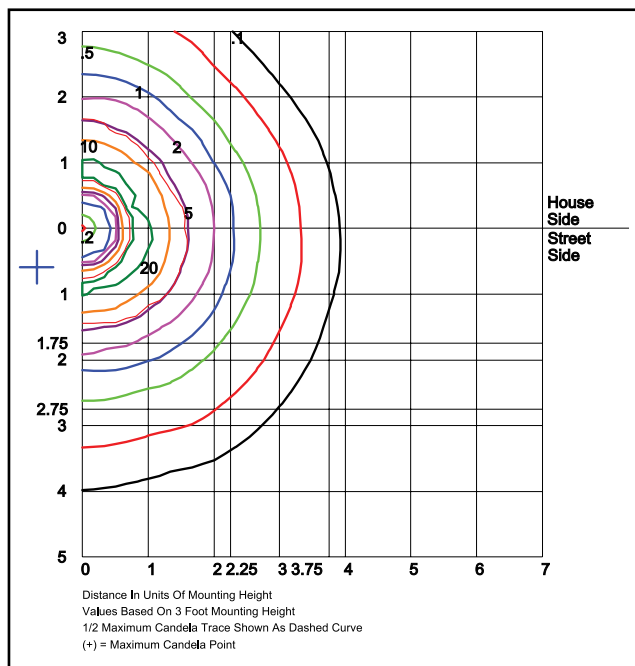
Grid in feet, Mounting Height = 3 ft.



**HG & HFG Round and Flat Top Bollard with Glass**

**Type III**

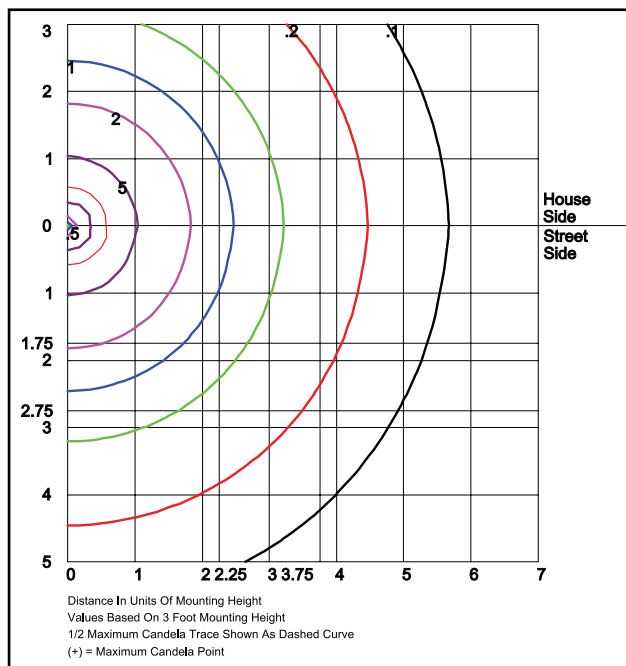
Grid in feet, Mounting Height = 3 ft.



**HL & HFL Round and Flat Top Bollard with Louvers**

**Type V**

Grid in feet, Mounting Height = 3 ft.



**HRW & HFRW Round Dome and Flat Top Bollard LED Reflector**

**Type V, LumaLens**

Grid in feet, Mounting Height = 3 ft.

## LumaCrete Q3D Concrete Printed Bollards

### Photometric Performance

Optic	Wattage (Catalog Logic)	10W (1X10)	15W (1X15)	20W (1X22)
	Input Watts	11.3W	15.9W	23.8W
Delivered Lumens				
Legacy Bollards with Cone Reflector C=Type III Optic	3000K	738	1,033	1,549
	4000K	800	1,120	1,680
	5000K	834	1,167	1,750
	BUG Rating	B0-U2-G1	B1-U3-G1	B1-U3-G1
Legacy Bollards with Cone Reflector F=Type V Optic	3000K	1,031	1,444	2,165
	4000K	1,119	1,566	2,349
	5000K	1,165	1,631	2,447
	BUG Rating	B1-U3-G1	B1-U3-G1	B1-U3-G1
Legacy Bollards with Glass C=Type III Optic	3000K	789	1,105	1,657
	4000K	856	1,199	1,798
	5000K	892	1,249	1,873
	BUG Rating	B1-U3-G1	B1-U3-G1	B1-U3-G1
Legacy Bollards with Glass F=Type V Optic	3000K	773	1,082	1,622
	4000K	838	1,173	1,760
	5000K	873	1,222	1,833
	BUG Rating	B1-U3-G1	B1-U3-G1	B1-U3-G1
Legacy Bollards with Louvers F=Type V Optic Only	3000K	521	730	1,094
	4000K	565	791	1,187
	5000K	589	824	1,236
	BUG Rating	B0-U2-G0	B1-U2-G1	B1-U3-G1

Optic	Wattage (Catalog Logic)	16W (1X16)	23W (1X23)	34W (1X34)
	Input Watts	17.7W	24.8W	37.2W
Delivered Lumens				
H1 & HB1 with Clear Polycarbonate F=Type V Optic	3000K	1,406	1,968	2,952
	4000K	1,525	2,135	3,202
	BUG Rating	B1-U3-G1	B1-U3-G1	B1-U3-G1
H1 & HB1 with LumaLens F=Type V Optic	3000K	899	1,258	1,888
	4000K	975	1,365	2,047
	BUG Rating	B1-U3-G1	B1-U3-G1	B1-U4-G2

Optic	Wattage (Catalog Logic)	10W (1X10)	19W (1X19)	28W (1X28)
	Input Watts	10.2W	20.4W	30.6W
Delivered Lumens				
H10 with Clear Polycarbonate Lens F=Type V Optic	3000K	855	1,710	2,566
	4000K	883	1,765	2,648
	5000K	917	1,834	2,751
	BUG Rating	B1-U3-G1	B1-U3-G1	B2-U3-G2
H10 with LumaLens F=Type V Optic	3000K	473	945	1,418
	4000K	488	976	1,463
	5000K	507	1,014	1,520
	BUG Rating	B0-U3-G1	B1-U3-G1	B1-U3-G2

### Projected Lumen Maintenance

Data shown for 4000 CCT		Compare to MH				
TM-21-11	Input Watts	Initial	25,000 Hrs	50,000 Hrs	100,000 Hrs	Calculated LED Life
H1/H1B L70 Lumen Maintenance @ 25°C / 77°F	All wattages up to and including 34w	1.00	0.96	0.92	0.84	187,000
H1/H1B L70 Lumen Maintenance @ 50°C / 122°F		1.00	0.93	0.87	0.73	113,000
H1/H1B L80 Lumen Maintenance @ 40°C / 104°F		1.00	0.97	0.93	0.86	144,000

Data shown for 5000 CCT		Compare to MH				
TM-21-11	Input Watts	Initial	25,000 Hrs	50,000 Hrs	100,000 Hrs	Calculated LED Life
H10 Lumen Maintenance @ 25°C / 77°F	All wattages up to and including 31w	1.00	0.93	0.86	0.72	106,000
H10 Lumen Maintenance @ 50°C / 122°F		1.00	0.91	0.83	0.66	88,000
H10 Lumen Maintenance @ 40°C / 104°F		1.00	0.92	0.84	0.67	61,000

Data shown for 5000 CCT		Compare to MH				
TM-21-11	Input Watts	Initial	25,000 Hrs	50,000 Hrs	100,000 Hrs	Calculated LED Life
Legacy Bollards L70 Lumen Maintenance @ 25°C / 77°F	All wattages up to and including 24w	1.00	0.95	0.90	0.80	147,000
Legacy Bollards L70 Lumen Maintenance @ 50°C / 122°F		1.00	0.89	0.78	0.55	67,000
Legacy Bollards L80 Lumen Maintenance @ 40°C / 104°F		1.00	0.92	0.85	0.70	66,000

#### NOTES:

1. Projected per IESNA TM-21-11. Data references the extrapolated performance projections for the base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.
2. Compare to MH box indicates suggested Light Loss Factor (LLF) to be used when comparing to Metal Halide (MH) systems.