

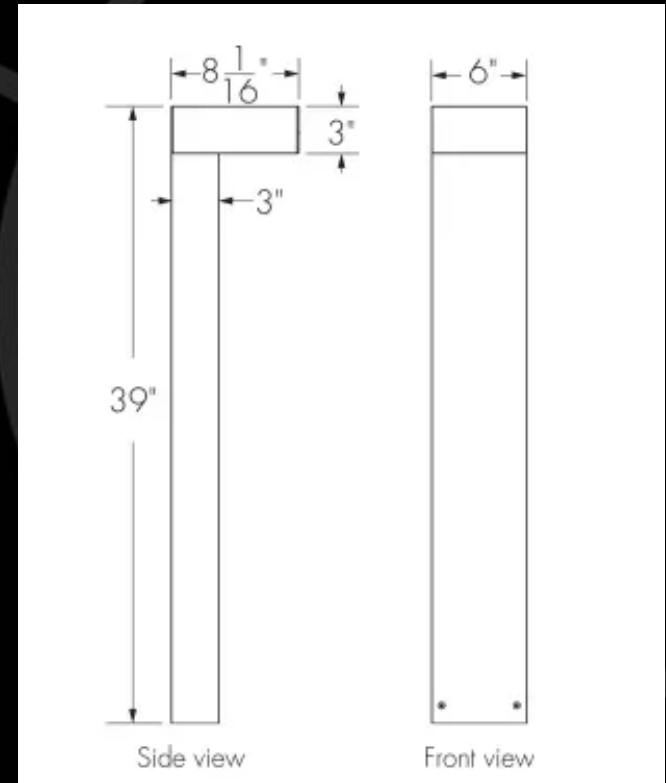
Oliver's Landing Exterior Lighting Concept

Furry Creek, BC



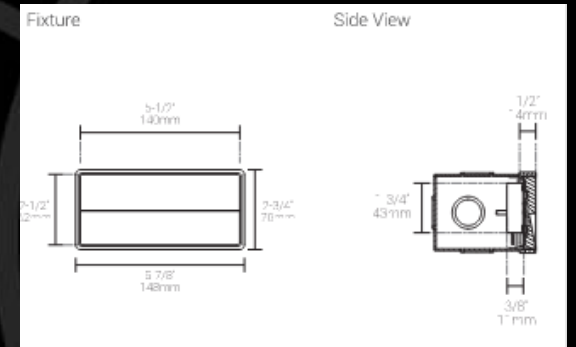
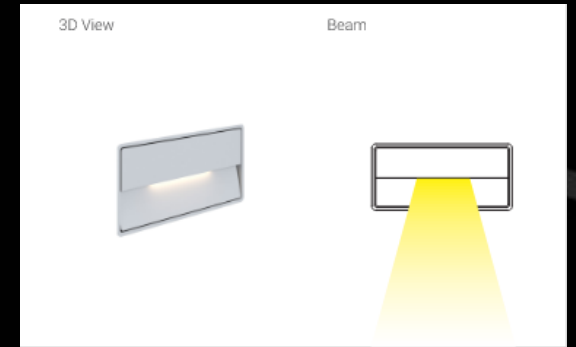
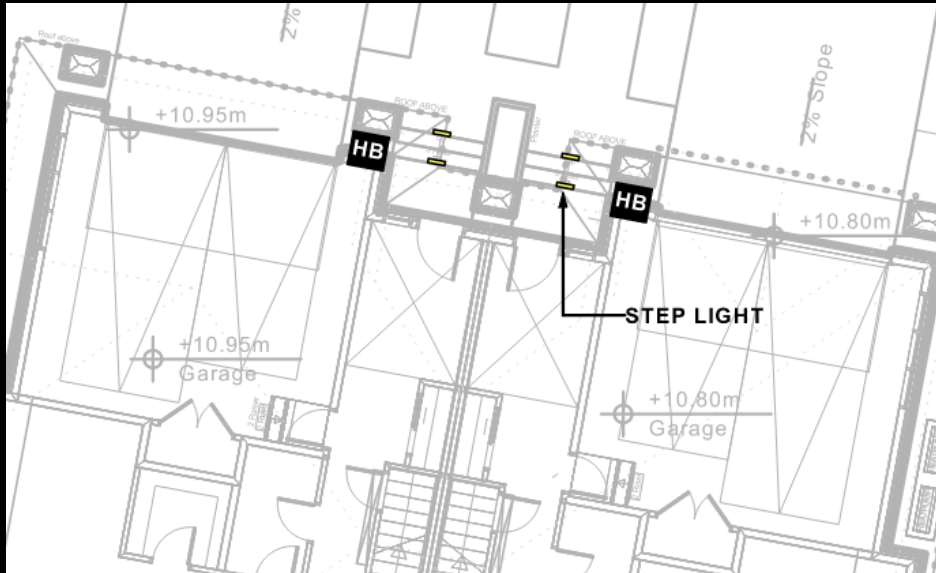
ROADWAY BOLLARD

Low level – Dark sky compliant lighting
Minimal backlight spill into residences
Photocell operated

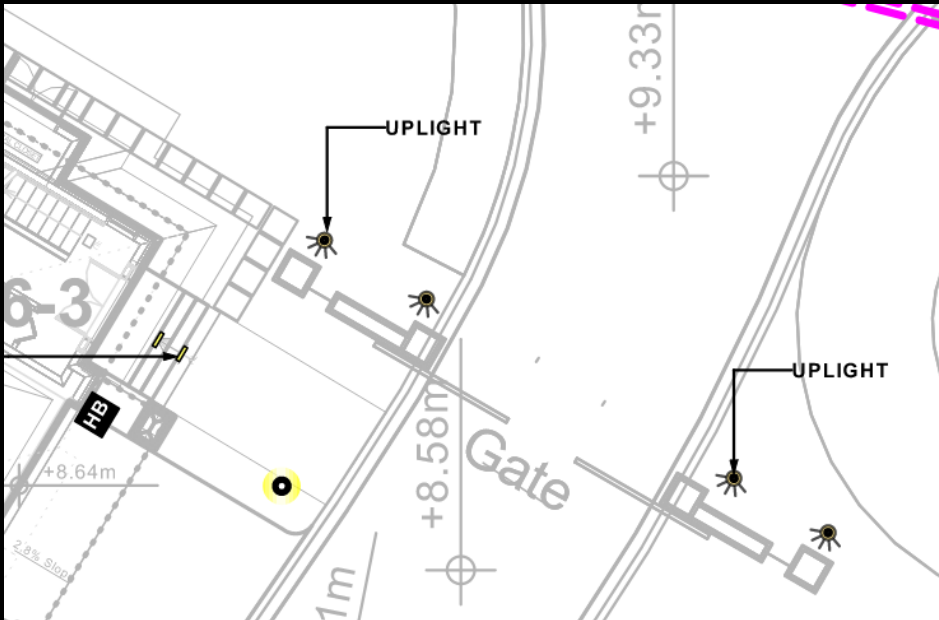
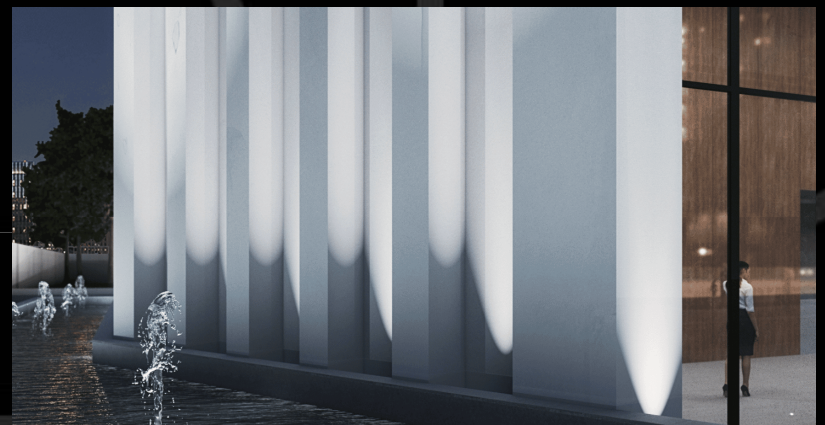
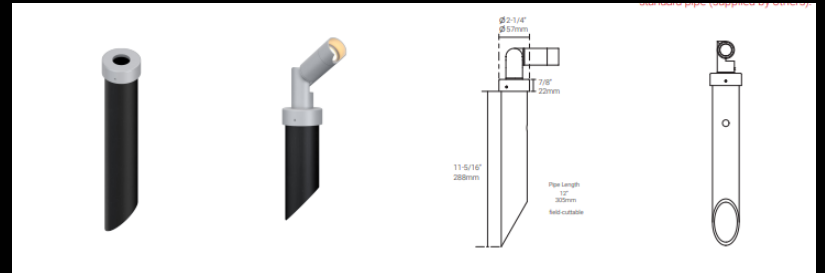


STEP LIGHT

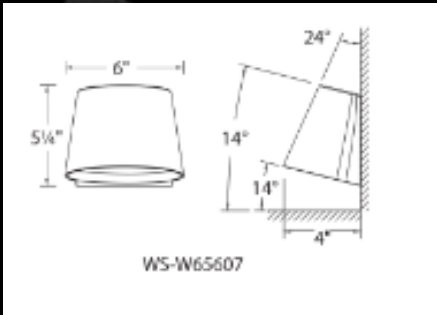
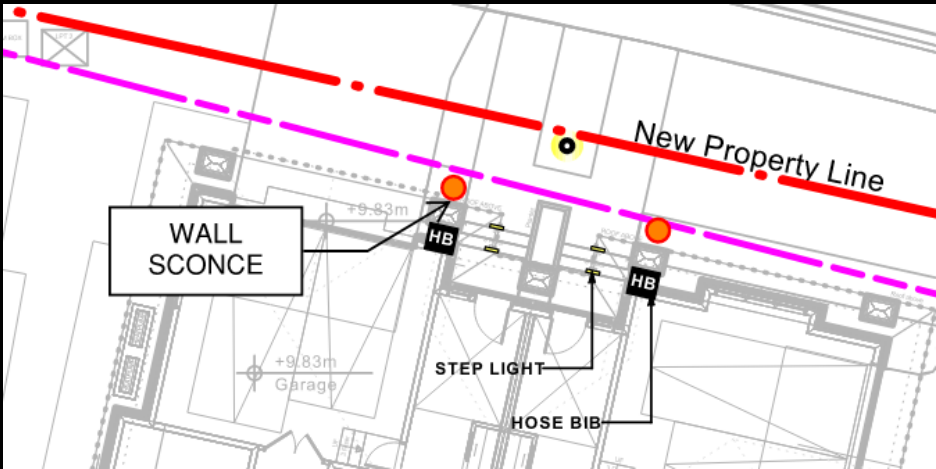
Inset in stair face at unit entries



SIGNAGE/ACCENT
UPLIGHTING – RECESSED IN GROUND AND SURFACE MOUNTED OPTIONS

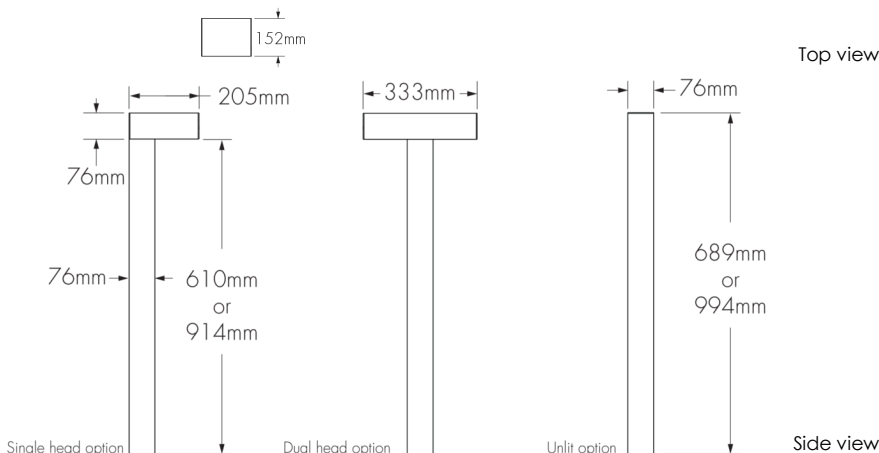


RESIDENTIAL WALL SCONCE
AT ENTRY/WALKWAYS

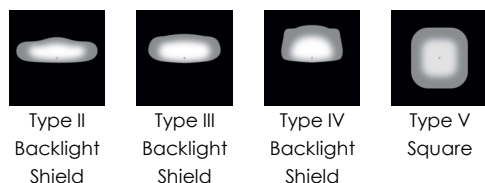
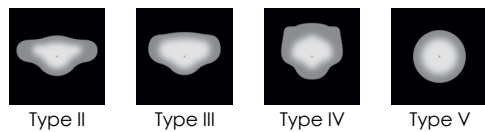


Project Name _____ Qty _____

Type _____ Catalog / Part Number _____



Distributions



Colour and Colour Temperature



Control

ON/OFF 0-10V LT

Ratings

IP66 (optical chamber) IK06 (lens) IK10 *(frame)
 *IK10 polycarbonate lens option available, consult factory.

Description

The Lumenpulse Lumenblade Bollard is an outdoor LED luminaire that uses a rectilinear version of the Lumencentro light engine to create a continuous line of light. Options include heights of either two-feet or three-feet, with a Single or Dual head. Its seen-but-not-seen, minimalist design is sustainable, blends with both contemporary and heritage architectures, provides a high level of security, and is sensitive to the natural environment with DarkSky approval, low outputs, and a BUG rating of 0.

Features

Mounting	Single head, Dual head, Unlit bollard
Height	0.6 m, 0.9 m
Distributions	Type II, Type III or Type IV (with or without backlight shield), Type V, Type V square
Optical Option (factory installed)	Louvre
Colour and Colour Temperature	True Amber 585nm-595nm (Turtle-Friendly), 2200K, 2700K, 3000K
Vibration Rating	Meets ANSI C136.31-2018 vibration rating for Bridge & Overpass applications
Options	Vibration Rated for Bridge and Overpass, Corrosion-resistant Coating for Hostile Environments, Surge Protector, Photoelectric Cell Button Type, Ground Fault Duplex Receptacle, Duplex Receptacle with USB A and USB C
Warranty	5-year limited warranty
Performance	
Output (Nominal Lumens)	Minimum 200lm (single head)/ Maximum 2000lm (dual head)
Efficacy	Up to 86 lm/W (N10 lumen output, 3000K, CRI 80+, Type III)
Colour Rendering	3 SDCM for CRI 70+, 2 SDCM for CRI 80+ and CRI 90+

DarkSky Certification



Certifications



Lumen Maintenance	TM-21 L70 > 145,000 hrs (reported, Ta 25 - 50 °C [77 - 122 °F])
DarkSky	DarkSky Approved (2200K, 2700K, 3000K and Amber colour temperatures, BUG rating of U0)

Physical

Head Option	Bollard Head
Housing Material	Extruded aluminium 6000 alloy series
Lens Material	Optical tempered clear glass (Clearsite lens), Optical tempered frosted glass (Frostsites lens), Optical tempered half-frosted glass (Half-Frostsites lens)
Surface Finish	Super durable resistant exterior polyester powder coating meets AAMA 2604-98 requirements (5-years Florida exposure). A corrosion resistant finish (CRC) pre-finish is available to meet ASTM B-117 & ASTM D-1654 (salt spray resistance) and ASTM D-2247 requirements (humidity resistance).
Weight	7.5 kg

Electrical and Control

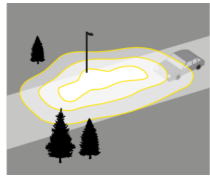
Voltage	120 volts, 208 volts, 240 volts, 277 volts, 347 volts, 480 volts
Control	On/Off Control, 0-10V Dimming, Lumentalk

Environmental

Storage Temperature	-40°C to 50°C [-40°F to 122°F] (device must reach start-up temperature value before operating)
Operating Temperature	-40°C [-40 °F] to 50°C [122 °F]
Start-up Temperature	-25°C [-13 °F] to 50°C [122 °F]
Impact Resistance Rating	IK06 (glass lens) IK10 (frame) *IK10 polycarbonate lens option available, consult factory
Ingress Protection Rating	IP66 (optical chamber) Wet location rated
Environment	Dry/damp/wet location

Photometric Information

Type II, 3000K, CRI 80+, Clearsite Lens



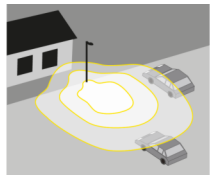
Nominal output [lm]	Typical delivered output [lm]	Efficiency (lm/W)	BUG Rating			Typical maximum power 120/277V (W)
			B	U	G	
N03	183	61	0	0	0	3
N05	366	61	0	0	0	6
N07	576	64	0	0	0	9
N10	750	68	0	0	0	11

Type III, 3000K, CRI 80+, Clearsite Lens



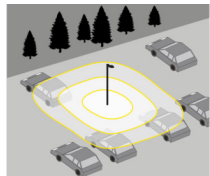
Nominal output [lm]	Typical delivered output [lm]	Efficiency (lm/W)	BUG Rating			Typical maximum power 120/277V (W)
			B	U	G	
N03	199	66	0	0	0	3
N05	399	67	0	0	0	6
N07	627	70	0	0	0	9
N10	817	74	0	0	0	11

Type IV, 3000K, CRI 80+, Clearsite Lens



Nominal output [lm]	Typical delivered output [lm]	Efficiency (lm/W)	BUG Rating			Typical maximum power 120/277V (W)
			B	U	G	
N03	163	54	0	0	0	3
N05	325	54	0	0	0	6
N07	511	57	0	0	0	9
N10	666	60	0	0	0	11

Type V Square, 3000K, CRI 80+, Clearsite Lens

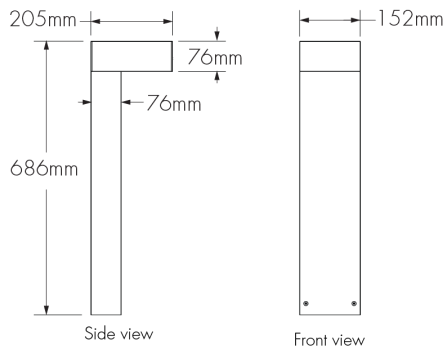


Nominal output [lm]	Typical delivered output [lm]	Efficiency (lm/W)	BUG Rating			Typical maximum power 120/277V (W)
			B	U	G	
N03	167	56	0	0	0	3
N05	335	56	0	0	0	6
N07	526	58	0	0	0	9
N10	685	62	1	0	1	11

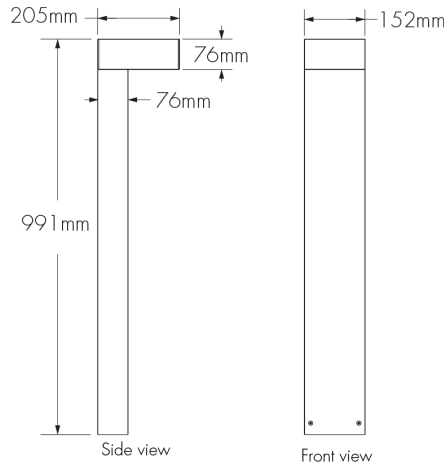
Photometric performance is measured in compliance with IESNA LM-79-19. Due to rapid and continuous advances in LED technology, photometric information is subject to change without notice.

Configuration Dimensions

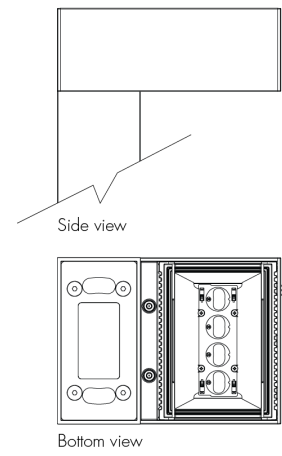
TM1 - Single Head Bollard, 0.6 m



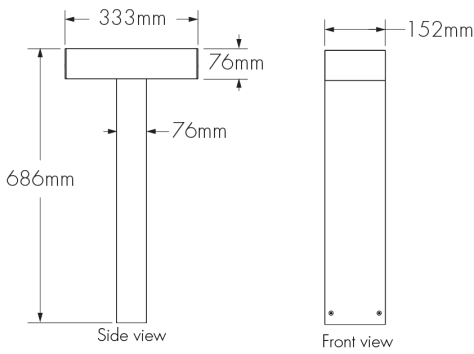
TM1 - Single Head Bollard, 0.9 m



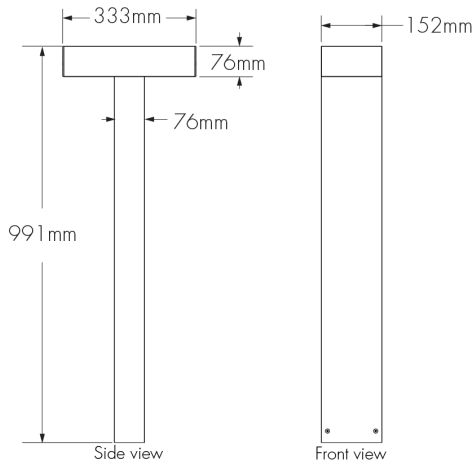
TM1 - Single Luminaire Head



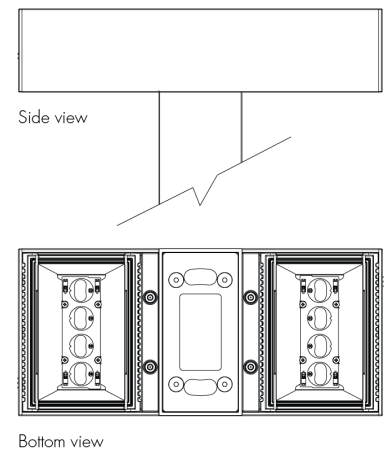
TM2 - Dual Head Bollard, 0.6 m



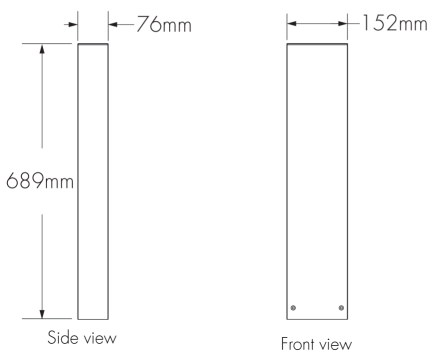
TM2 - Dual Head Bollard, 0.9 m



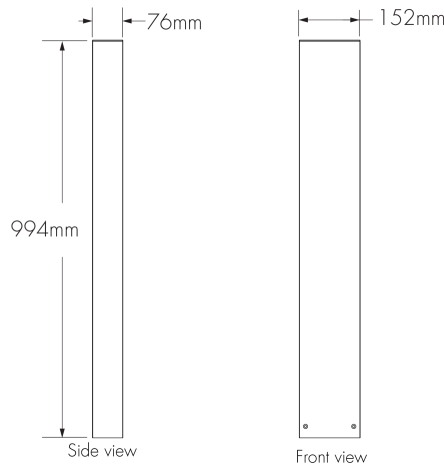
TM2 - Dual Luminaire Head



UNLIT - Unlit Bollard 0.6 m



UNLIT - Unlit Bollard 0.9 m

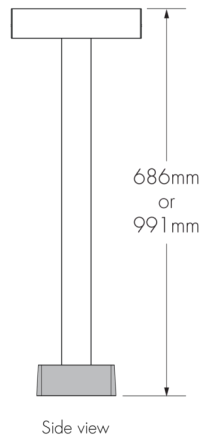


VRBO Option Dimensions

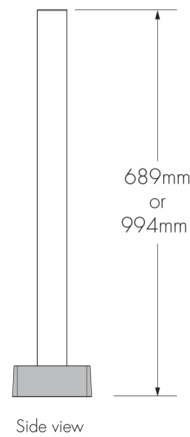
TM1 - Single Head Bollard



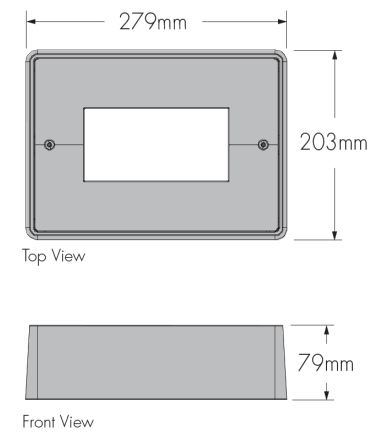
TM2 - Dual Head Bollard



UNLIT - Unlit Bollard

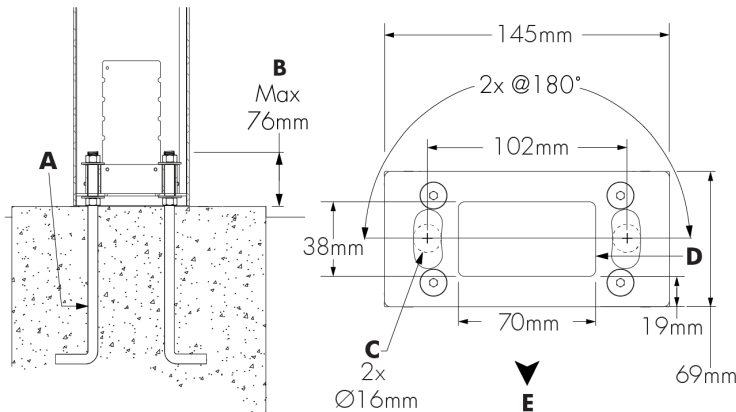


Base Cover



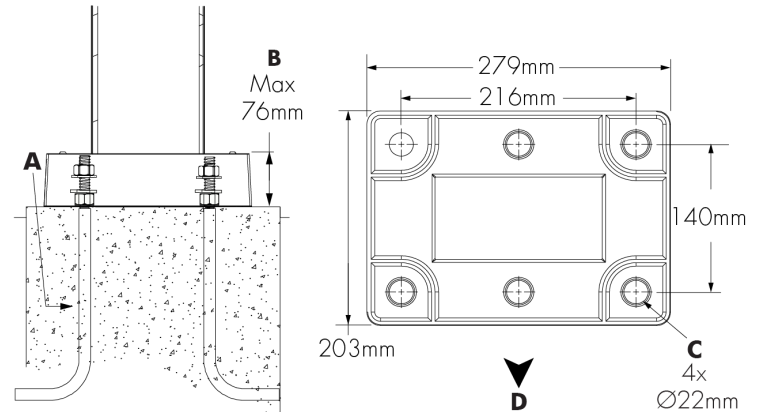
Anchoring Details

Standard Anchoring



- A** - (2x) Ø13 mm by 305 mm long anchor bolts with flats washers and nuts for each
- B** - Between 64 mm and 76 mm of the anchor bolts must be above ground for installation
- C** - Bolt circle
- D** - Hole for conduit (conduit by others)
- E** - Street side/Light side

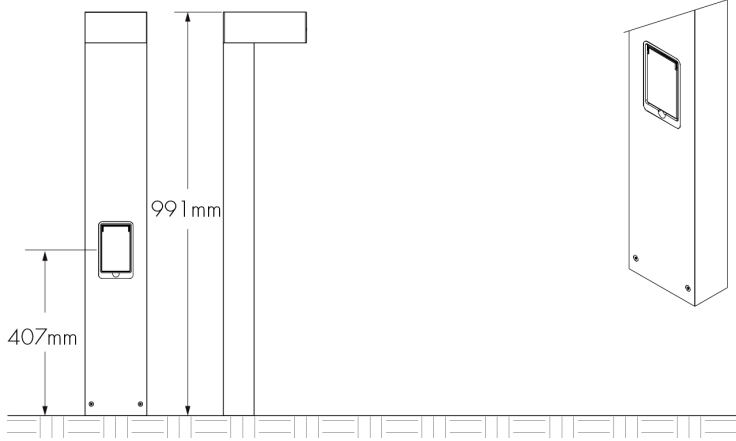
BLDB-VRBO Anchoring



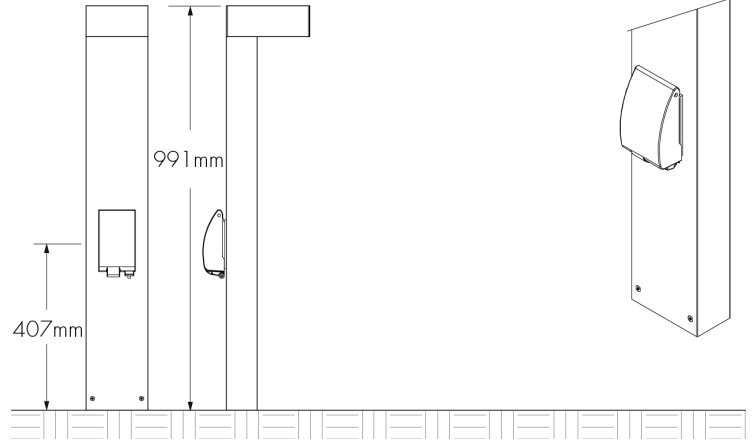
- A** - (4x) Ø19 mm by 660 mm long anchor bolts with flats washers and nuts for each
- B** - Between 64 mm and 76 mm of the anchor bolts must be above ground for installation
- C** - Bolt circle
- D** - Access door and street side

Duplex Receptacle Installation Dimensions

DRG - Ground Fault Duplex Receptacle
USB - Duplex Receptacle With USB A and USB C



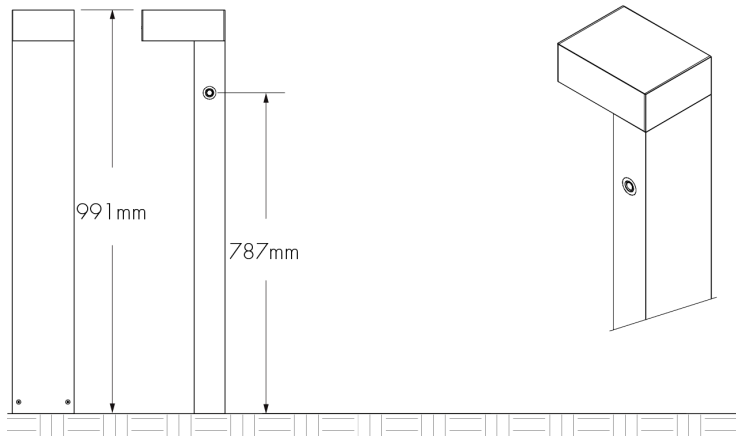
DRG IU - Ground Fault Duplex Receptacle (While in Use)
USB IU - Duplex Receptacle With USB A And USB C (While In Use)



The duplex receptacle must be installed in accordance with applicable national and local electrical and construction codes by a person familiar with the construction and operation of the product and the hazards involved. Refer to national and local electrical codes before selecting a duplex receptacle to ensure all requirements are met.

Photoelectric Cell Button Installation Dimensions

PB - Photoelectric Cell Button Type

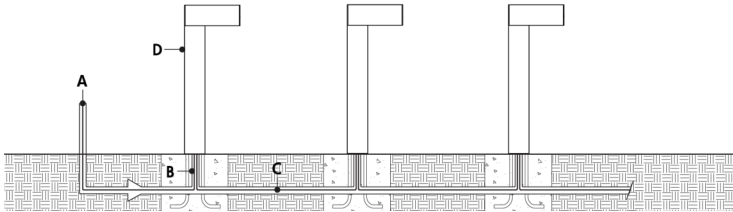


Typical Wiring Diagrams

Wiring Colour Code

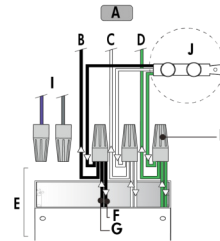
Color	Black	White	Green	Purple	Gray
Use	Line	Line/Neutral	Ground	0 -10V+	0 -10V -

On/Off Control (NO)



- A - Power input (120-480V)
- B - Conduit (by others)
- C - Power wiring (by others)
- D - Lumenblade Bollard

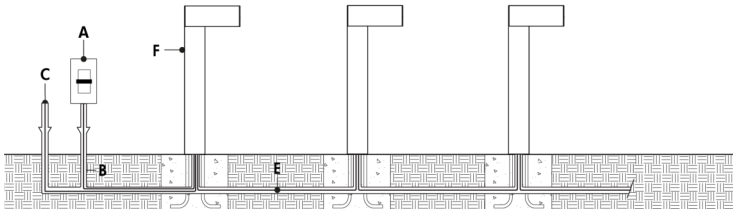
On/Off Control (NO) - Wiring Detail



- A - To fixture
- B - Line
- C - Line/Neutral
- D - Ground
- E - Conduit (by others)
- F - To next fixture
- G - Power input or from previous fixture
- H - Wire-nuts (by others)
- I - Not required
- J - Wiring for SP option

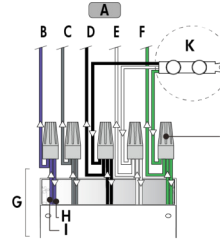
- Consult factory for specific applications and maximum fixture count/cable length recommendations.

0-10V Dimming (DIM)



- A - Dimmer (by others)
- B - Data wiring (by others)
- C - Power input (120-480V, wiring by others)
- D - Conduit (by others)
- E - Power and data wiring (by others)
- F - Lumenblade Bollard

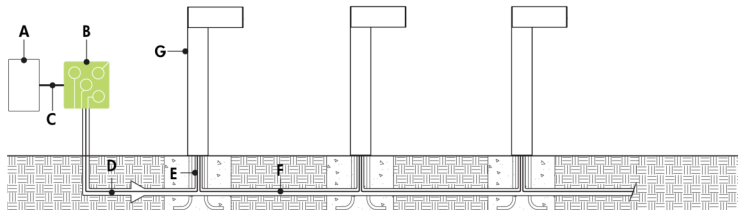
0-10V Dimming (DIM) - Wiring Detail



- A - To fixture
- B - 0-10V +
- C - 0-10V -
- D - Line
- E - Neutral
- F - Ground
- G - Conduit (by others)
- H - To next fixture
- I - Power input or from previous fixture
- J - Wire-nuts (by others)
- K - Wiring for SP option

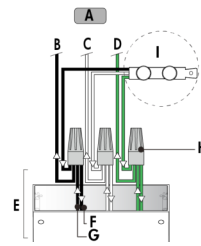
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- 0-10V mA ratings: passive dimmer (Current Sink): 3mA per fixture, active dimmer (Current Source): 0.5mA per fixture.
- 1% minimum dimming value.

Lumentalk (LT)



- A - Dimmer/controller (order separately from Lumenpulse, or by others)
- B - Lumentranslator (LTL-010)
- C - Data wiring (by others)
- D - Power line (120-277V, wiring by others)
- E - Conduit (by others)
- F - Power wiring (by others)
- G - Lumenblade Bollard

Lumentalk (LT) - Wiring Detail



- A - To fixture
- B - Line
- C - Line/Neutral
- D - Ground
- E - Conduit (by others)
- F - To next fixture
- G - Power input or from previous fixture
- H - Wire-nuts (by others)
- I - Wiring for SP option

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Lumentalk enabled fixtures must be commissioned using LumentalkID software and a LID-LT. Consult factory for details.
- Maximum of 1 transmitter (Lumentranslator or Lumenlink) per system.
- No third party fixtures allowed on the same circuit.
- DRG or USB option must be on a separated circuit.

How to Order

Housing	Mounting	Voltage	Height	Lens ⁽³⁾	Output (Nominal Lumens) ⁽⁸⁾	Colour and Colour Temperature	Colour Rendering	Distributions	Optical Option	Finish	Control
BLDB Lumenblade Bollard	TM1 Single head	120 120 volts	2FT 0.6 m	CSL Clearsite Lens ⁽⁴⁾	N02 200lm (4 LEDs) ^{(4) (9) (10)}	AMB Amber ^{(4) (10) (11)}	CRI 70 CRI 70+ ⁽¹⁴⁾	2 Type II	LV Louvre ^{(17) (18)}	BK Black Sandtex®	DIM 0-10V Dimming ⁽²²⁾
	TM2 Dual head ⁽¹⁾	208 208 volts	3FT 0.9 m	FSL Frostsife Lens ⁽⁵⁾	N03 300lm (4 LEDs)	22K 2200K ⁽¹²⁾	CRI 80 CRI 80+ ⁽¹⁵⁾	2BLS Type II Backlight Shield		BRZ Bronze Sandtex®	LT Lumentalk ^{(23) (24)}
	UNLIT Unlit bollard	240 240 volts		HFSL Half-Frosted Site Lens ^{(6) (7)}	N05 500lm (4 LEDs)	27K 2700K ⁽¹³⁾	CRI 90 CRI 90+ ⁽¹⁴⁾	3 Type III		SI Silver Sandtex®	
		277 277 volts			N07 700lm (4 LEDs)	30K 3000K		3BLS Type III Backlight Shield		BKTX Textured Black	
		347 347 volts ⁽²⁾			N10 1000lm (4 LEDs)			4 Type IV		BRZTX Textured Bronze Non- Metallic	
		480 480 volts ⁽²⁾						4BLS Type IV Backlight Shield		GRATX Textured Medium Grey	

Notes:

- A ground fault duplex receptacle (DRG or DRG-IU) and a duplex USB receptacle (USB or USB IU) cannot be combined with TM2 mounting.
- Not available with LT control option.
- Standard IK06 rating for glass lens. IK10 rated polycarbonate lens available, please consult factory.
- Not available with type 5 distribution.
- Available with type 3 and 5 distributions only.
- Available with Type 2, 3 and 4 distributions only.
- Available for N03, N05, N07 and N10 outputs only.
- Lumen output will vary according to the lens and distribution specified for the fixture. Please consult the photometric information section of the specification sheet for more details.
- Available with AMB colour temperature only.
- Not available for FSL and HFSL lens.
- Available with N02 output only.
- Available for CRI 80 only.
- Available for CRI 80 and CRI 90 only.
- Binning within a 3-step MacAdam ellipse
- Binning within a 2-step MacAdam ellipse, with the exception of 2200K.
- Binning within a 2-step MacAdam ellipse.
- Available with CSL and HFSL lenses only.
- Factory installed.
- Specify RAL number followed by "TX" for textured finish (ex: RAL9007TX) or STX for Sandtex finish (ex: RAL9007STX). Textured or Sandtex finishes are recommended for the durability of all products. If a finish is not specified with the RAL number (ex: RAL9007), a glossy finish will be provided. Please consult factory for other RAL textures and glosses, or to match alternate colour charts. Final colour matching results may vary.
- Setup charges apply for RAL colours. Consult factory for details.
- Longer lead times can be expected for custom RAL colour finishes.
- DIM control can be used as NO (On/Off control) if no data is required.
- Not available with PB option.
- When combined with 0.6 m height option, Lumentalk cannot be combined with a ground fault duplex receptacle (DRG or DRG IU) or a duplex USB receptacle (USB or USB IU).

How to Order

Option	Anchor Bolts Option	Head Option	Head Lens	Head Output	Head Colour and Colour Temperature	Head Colour Rendering	Head Distributions	Head Optical Option
VRBO Vibration Rated for Bridge and Overpass ⁽²⁵⁾ ⁽²⁶⁾ CRC Corrosion-resistant coating ⁽²⁷⁾ ⁽²⁸⁾ SP Surge Protector PB Photoelectric Cell Button Type ⁽²⁾ ⁽²⁹⁾ DRG Ground Fault Duplex Receptacle ⁽³⁰⁾ DRG IU Ground Fault Duplex Receptacle (while in use) ⁽³⁰⁾ USB Duplex Receptacle with USB A and USB C ⁽³⁰⁾ USB IU Duplex Receptacle with USB A and USB C in-use ⁽³⁰⁾	AB Anchor Bolts ⁽³¹⁾	BH Bollard Head	CSL Clearsite Lens ⁽⁴⁾ FSL Frostsite Lens ⁽⁵⁾ HFSL Half-Frosted Site Lens ⁽⁶⁾ ⁽⁷⁾	N02 200lm (4 LEDs) ⁽⁴⁾ ⁽⁹⁾ ⁽¹⁰⁾ N03 300lm (4 LEDs) N05 500lm (4 LEDs) N07 700lm (4 LEDs) N10 1000lm (4 LEDs)	AMB Amber ⁽⁴⁾ ⁽¹⁰⁾ ⁽¹¹⁾ 22K 2200K ⁽¹²⁾ 27K 2700K ⁽¹³⁾ 30K 3000K	CRI 70 CRI 70+ ⁽¹⁴⁾ CRI 80 CRI 80+ ⁽¹⁵⁾ CRI 90 CRI 90+ ⁽¹⁶⁾	2 Type II 2BLS Type II Backlight Shield 3 Type III 3BLS Type III Backlight Shield 4 Type IV 4BLS Type IV Backlight Shield 5 Type V 5S Type V Square	LV Louvre ⁽¹⁷⁾

Notes:

- 2. Not available with LT control option.
- 4. Not available with type 5 distribution.
- 5. Available with type 3 and 5 distributions only.
- 6. Available with Type 2, 3 and 4 distributions only.
- 7. Available for N03, N05, N07 and N10 outputs only.
- 9. Available with AMB colour temperature only.
- 10. Not available for FSL and HFSL lens.
- 11. Available with N02 output only.
- 12. Available for CRI 80 only.
- 13. Available for CRI 80 and CRI 90 only.
- 14. Binning within a 3-step MacAdam ellipse
- 15. Binning within a 2-step MacAdam ellipse, with the exception of 2200K.
- 16. Binning within a 2-step MacAdam ellipse.
- 17. Available with CSL and HFSL lenses only.
- 25. Vibration tested in accordance with ANSI 136.31 2018 for bridge and overpass applications at 5Gv.
- 26. Specify only if a bridge or overpass application is required.
- 27. Use only when exposed to salt spray. This option is not required for normal outdoor exposure.
- 28. Setup charges apply. Consult factory for details.
- 29. Not available for 480V voltage option.
- 30. A ground fault duplex receptacle (DRG or DRG IU) and a duplex USB receptacle (USB or USB IU) cannot be combined.
- 31. Anchor bolts provided with double nuts, washers and template. One template provided for every 5 luminaires.

L770

EXTERIOR | INTERIOR

Trimless Steplight | For walls, stairs, and walkways.

- Wet, Damp, and Dry location



Ordering Information

Clear Form

Date : _____

Quantity : _____

Project : _____

Note : _____

Type : _____

Specifications

Luminaire | Example Code: L770-6-W30H-WH

Product	Version	CCT & CRI ¹	Finish ²
L770			
	3 3W	W22S 2200K 80+	Aluminum Finishes: MA matte clear anodized BK black powder coated WH white powder coated BZ bronze powder coated
	6 6W	W27H 2700K 90+	
		W30H 3000K 90+	
		W35H 3500K 90+	
		W41H 4100K 90+	

System Components (Ordered Separately)

Remote Driver : _____

* Consult factory for the alternative option of using remote driver.

Important Notes

Specifications

- Refer to pg.02 - for Colour Consistency details.
- Refer to Appendix or MP Lighting website for complete look of luminaire with different finish options.

Warranty Notes & Disclaimer

Malfunction and damage to product due to incompatible dimming system or misuse will not be covered under warranty. Consult MP Lighting for recommended drivers. If the fixture has an option to be installed with a dimming control system, consult a dimming system manufacturer with minimum load before installing. MP Lighting reserves the right, at its sole discretion, at any time and without notice, to make design changes to any of our products. Consult MP Lighting website for most updated documentation.

L770

EXTERIOR | INTERIOR

Trimless Steplight | For walls, stairs, and walkways.

- Wet, Damp, and Dry location



Performance

Wattage	Forward Current	Power Consumption Budget per fixture (including driver)	LED output (Source)	Fixture Output (Delivered)
3W	350mA	4W	330 lm	29 lm
6W	700mA	8W	660 lm	53 lm

Application

Environment	Dry / Damp / Wet Location approved. IP 66.
Mounting	Recessed mount to MP Lighting Single Gang Box (EBX-SGB1 , included). Box dimension: Length 4-3/8" (111mm) X Width 2-5/8" (66mm) X Height (depth) 2-5/16" (74mm)

Electrical

Power Supplies	Integral LED drivers (120V AC input, Non-dimmable) Consult factory for Integral LED drivers (120-277V AC input, ELV / 0-10V dimmable) or alternative driver options and remote driver options.
Control	On/off control Dimming: ELV or 0-10V dimming with appropriate drivers Other options (consult factory): TRIAC/MLV, DMX, DALI, Casambi, Power over Ethernet

Luminaire Construction

LED Light Source	W22S = CCT: 2200K, CRI (Ra): 80+, Colour Consistency: 3SDCM W27H = CCT: 2700K, CRI (Ra): 90+, Colour Consistency: 2SDCM W30H = CCT: 3000K, CRI (Ra): 90+, Colour Consistency: 2SDCM W35H = CCT: 3500K, CRI (Ra): 90+, Colour Consistency: 3SDCM (Contact factory for 2SDCM option) W41H = CCT: 4100K, CRI (Ra): 90+, Colour Consistency: 3SDCM
Weight	1.5lbs (0.68kg)
Material	Fixture: machined marine-grade aluminum with polycarbonate lens
Supplied with	Installation: Back box and mounting kit: mounting bracket, mounting screws x 2, mounting plage, foam/tape, threaded rod, washer, and nut Driver: Non-dimmable integral driver and single gang box.
Warranty & LED Life	5 years limited warranty Estimated useful life of LED is 50,000 hours.

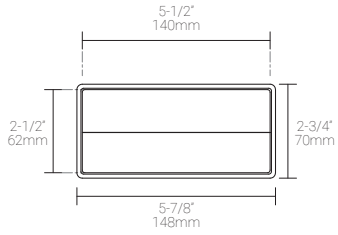
Ordered Separately

System Components	Power supplies: alternate remote driver for dimming options Please consult factory or visit Recommended Drivers for available driver options.
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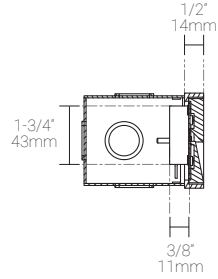
Mounting Options & Dimensions

LED Insert Dimensions

Fixture



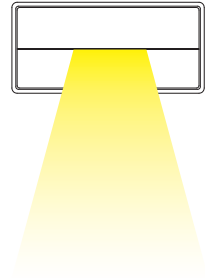
Side View



3D View



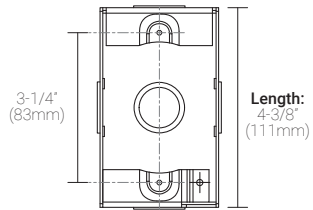
Beam



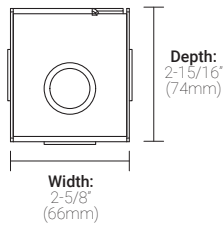
Back Box Dimensions

MP Lighting Single Gang Back Box | Order Code: EBX-SGB1

Top View

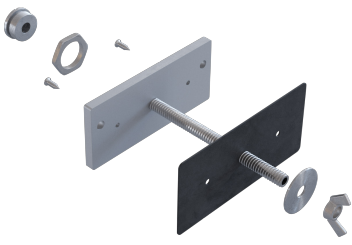


Side View

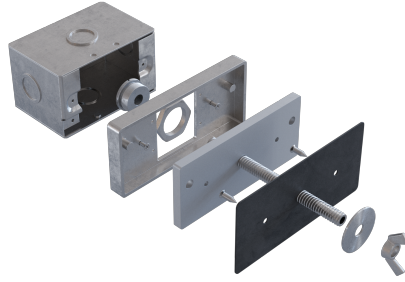


MK1 | For walls and stairs

Mounting Kit Exploding Views



MK1-L770



MK1-L770 shown with EBX-SGB1



MK1-L770 shown with EBX-SGB1 and Plywood Form

Wall-mount Plywood Form Installation (shown with L770)

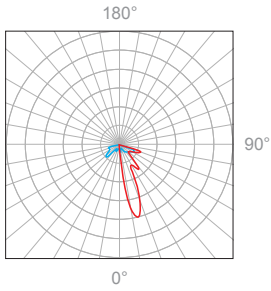


Stairs Plywood Form Installation (shown with L770)

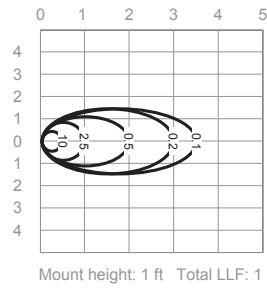


3W, 3000K, 90+ CRI

Polar Candela Distribution



Isofootcandle Plot



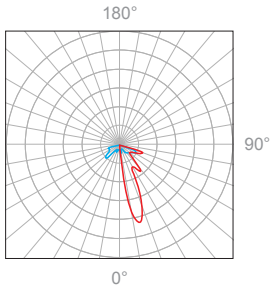
Illuminance at a Distance

Distance		Center Beam fc
0.5ft	0.15m	10fc
1.0ft	0.30m	2.5fc
2.0ft	0.61m	0.5fc
3.0ft	0.91m	0.2fc
3.5ft	1.07m	0.1fc

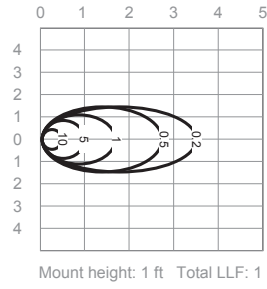
Delivered Lumen: 30.1lm
 ■ Vertical Beam Spread: 83.1°
 ■ Horizontal Beam Spread: 16.7°

6W, 3000K, 90+ CRI

Polar Candela Distribution



Isofootcandle Plot



Illuminance at a Distance

Distance		Center Beam fc
0.5ft	0.15m	10fc
1.0ft	0.30m	5fc
1.6ft	0.49m	1fc
2.6ft	0.79m	0.5fc
3.5ft	1.07m	0.2fc

Delivered Lumen: 59.5lm
 ■ Vertical Beam Spread: 83.1°
 ■ Horizontal Beam Spread: 16.7°

Appendix

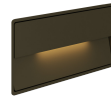
Aluminum Finishes



MA matte clear anodized



BK black powder coated



BZ bronze powder coated



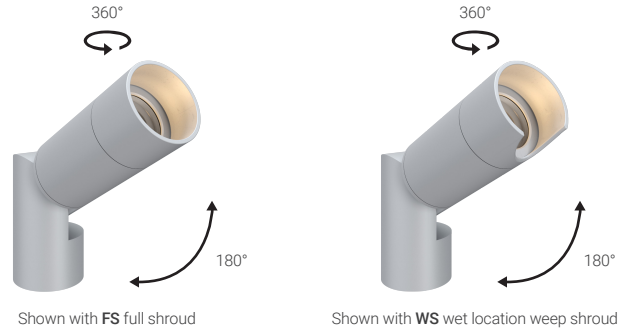
WH white powder coated

L930

EXTERIOR | INTERIOR

Spotlight | For surface mount on ground, ceilings & walls

Wet, Damp, and Dry location



Ordering Information

Clear Form

Date : _____ Quantity : _____

Project : _____ Note : _____

Type : _____

Specifications

Luminaire | Example Code: L930-B2-PS-2-W30H-S-ELB-WS-S6 // L930-M1-2-W30H-S-ELB-WS-MA

Product	Canopy ¹	Mounting ² (optional for B2/B3)	Version	CCT & CRI ³	Beam Angle	Accessories (optional)	Shroud	Finish ⁴
L930								
	B1	PS pipe stake ⁵	1 1W	W22S 2200K 80+	S spot 12°	ELB eggcrate louver	FS full shroud	Aluminum Finishes: MA matte clear anodized BA black anodized BZ bronze powder coated Stainless Steel Finish: S6 stainless steel 316
	B2	MB mounting bracket	2 2W	W27H 2700K 90+	N narrow flood 30°		WS wet location weep shroud	
	B3			W30H 3000K 90+ W35H 3500K 90+ W41H 4100K 90+ AMB amber LED				

Product	Mounting	Version	CCT & CRI ³	Beam Angle	Accessories (optional)	Shroud	Finish ⁴
L930							
	M1 surface mount adapter ⁶	1 1W 2 2W	W22S 2200K 80+ W27H 2700K 90+ W30H 3000K 90+ W35H 3500K 90+ W41H 4100K 90+ AMB amber LED	S spot 12° N narrow flood 30°	ELB eggcrate louver	FS full shroud WS wet location weep shroud	Aluminum Finishes: MA matte clear anodized BA black anodized

System Components (Ordered Separately)

Remote Driver : _____ Control System : _____

On/Off | Dimming ELV or 0-10 dimming
 Other options (consult factory) TRIAC/MLV, DMX, DALI, Casambi, PoE

Important Notes

Specification

- Refer to pg.3-5 - Mounting Options & Dimensions for details. B2 and B3 can be surface-mounted with mounting brackets and also work as a stake with Pipe Stake option.
- Mounting bracket is required for surface-mount with B2/B3 canopy.
- Refer to pg.2 - Electrical for Colour Consistency details.
- Refer to Appendix or MP Lighting website for complete look of luminaire with different finish options. S6 (stainless steel 316) is only available with B2 and B4 canopies.
- Pipe Stake's length is 12" (305mm).
- Surface mount adapter is a standalone mounting option and cannot be combined with any canopies. Available in MA (matte clear anodized) or BA (black anodized) finishes only.

Warranty Notes & Disclaimer

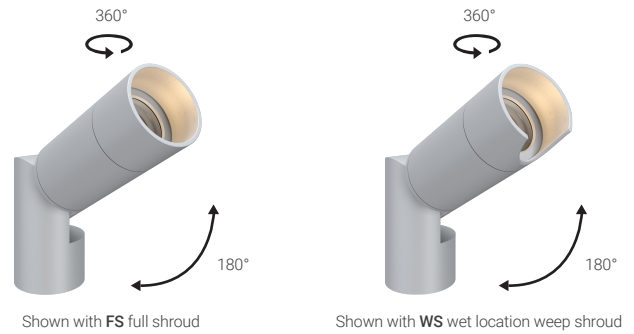
Malfunction and damage to product due to incompatible dimming system or misuse will not be covered under warranty. Consult MP Lighting for recommended drivers. If the fixture has an option to be installed with a dimming control system, consult a dimming system manufacturer with minimum load before installing. MP Lighting reserves the right, at its sole discretion, at any time and without notice, to make design changes to any of our products. Consult MP Lighting website for most updated documentation.

L930

EXTERIOR | INTERIOR

Spotlight | For surface mount on ground, ceilings & walls

• Wet, Damp, and Dry location



Performance

Wattage	Forward Current	Power Consumption Budget per fixture (including driver)	LED output (Source)	Fixture Output (Delivered)
1W	350mA	1.3W	110 lm	65-75 lm
2W	700mA	2.6W	220 lm	129-149 lm

Application

Environment	Wet / Damp / Dry Location approved. IP 66. Wet location weep shroud (WS) can be specified where proper drainage for water in shroud is required.
Mounting	B1: metal stake designed to be pushed into soil B2: compatible with Pipe Stake (ordered separately), 1-1/2" OD standard pipe (supplied by others), or mounts to surface with mounting brackets B3: compatible with Pipe Stake (ordered separately), 1-1/2" OD standard pipe (supplied by others), or mounts to surface with mounting brackets

Electrical

Power Supplies	Remote LED drivers (120-277V AC input, constant current output): Fixtures to be wired in series. Integral driver available with B3 canopy --- Consult factory.
Control	On/off control Dimming: ELV or 0-10V dimming with appropriate drivers Other options (consult factory): TRIAC/MLV, DMX, DALI, Casambi, Power over Ethernet

Luminaire Construction

LED Light Source	W22S = CCT: 2200K, CRI (Ra): 80+, Colour Consistency: 3SDCM W27H = CCT: 2700K, CRI (Ra): 90+, Colour Consistency: 2SDCM W30H = CCT: 3000K, CRI (Ra): 90+, Colour Consistency: 2SDCM W35H = CCT: 3500K, CRI (Ra): 90+, Colour Consistency: 3SDCM (Contact factory for 2SDCM option) W41H = CCT: 4100K, CRI (Ra): 90+, Colour Consistency: 3SDCM AMB = amber LED light
Standard Compliance	✓ADA-compliant ✓WELL standard – Feature 58: Color Quality
Weight	N/A
Material	Fixture: machined marine-grade aluminum or stainless steel 316
Supplied with	N/A
Warranty & LED Life	5 years limited warranty Estimated useful life of LED is 50,000 hours.

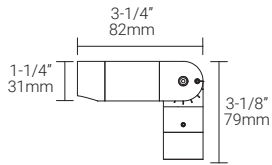
Ordered Separately

System Components	Power supplies: remote driver Please consult factory or visit Recommended Drivers for available driver options.
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Mounting Options & Dimensions

LED Fixture Dimensions

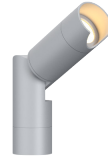
Fixture



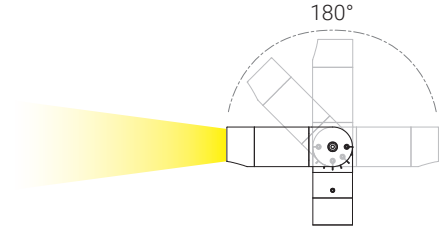
Front View



3D View

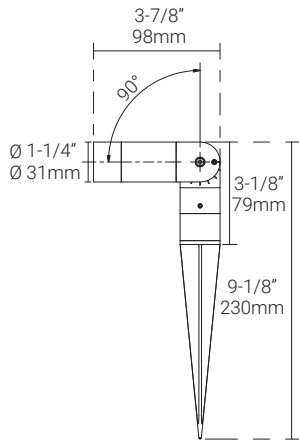


Beam

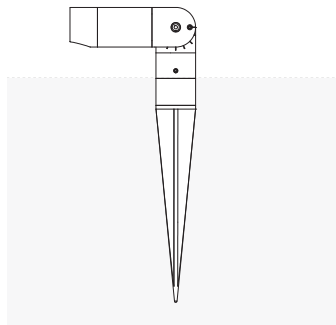


Ground Installation | shown with B1, metal stake

Fixture with B1 stake

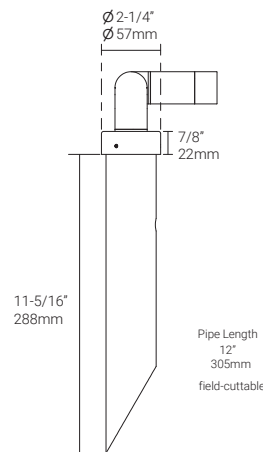


Ground Installation:
B1 stake pushed into soil

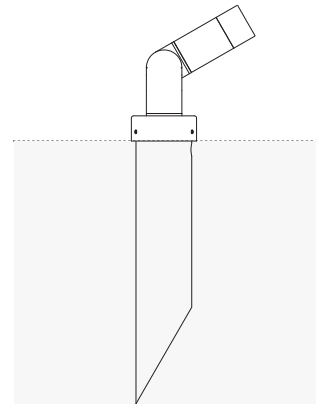


Ground Installation | shown with PS, pipe stake

Fixture with B2 stake

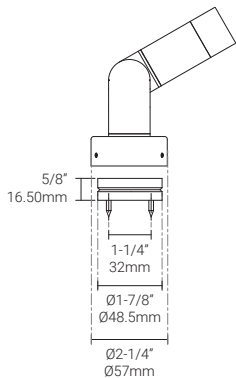


Ground Installation:
Pipe stake pushed into soil

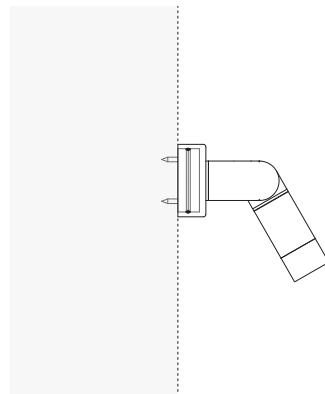


Wall Installation | shown with B2 & MB (mounting brackets)

Fixture with B2 Canopy and
Mounting Brackets

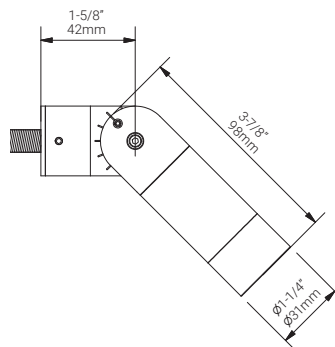


Wall Installation:
B2 screwed to wall with MB

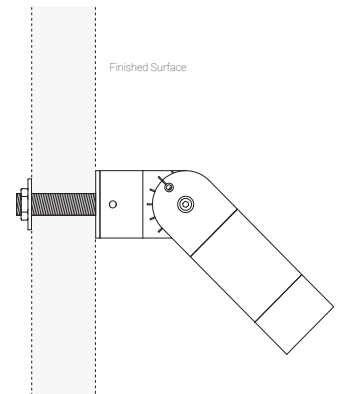


Wall Installation | shown with M1 (surface mount adapter)

Fixture with Surface Mount
Adapter



Wall Installation:
Surface Mount Adapter



Mounting Options & Dimensions | Stake - for pushing into soil & gravel

B1 | Outdoor rated metal stake that can be pushed into gravel or soil

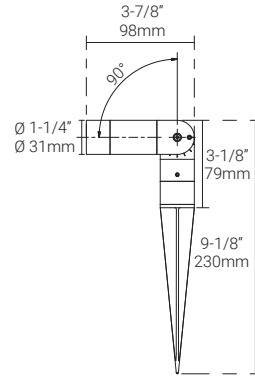
Stake



Fixture with stake



Dimensions



B2 with PS | Pipe stake that can be pushed deeper into gravel or soil for more stability

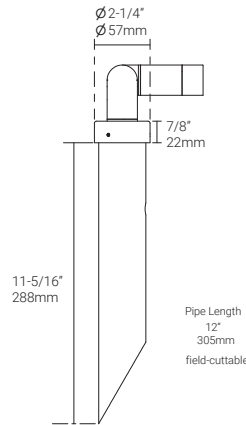
B2 with Pipe Stake



Fixture with canopy & pipe stake



Dimensions



Compatible with 1-1/2" OD standard pipe (supplied by others).



B3 with PS | Pipe stake that can be pushed deeper into gravel or soil for more stability

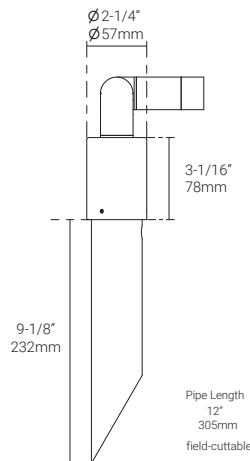
B3 with Pipe Stake



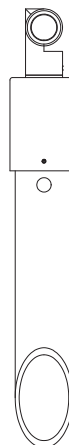
Fixture with canopy & pipe stake



Dimensions



Compatible with 1-1/2" OD standard pipe (supplied by others).



Mounting Options & Dimensions | Canopy - for surface mount application

B2 with MB | Mounting brackets that can be mounted on the surface material

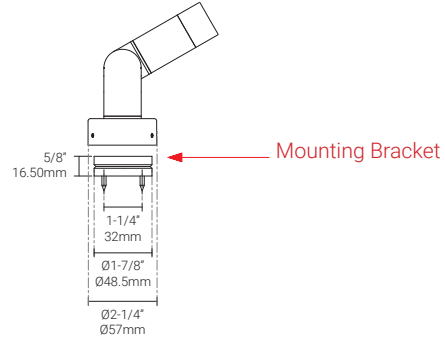
Canopy & Mounting Bracket



Fixture with Canopy



Dimensions



B3 | Compatible with Landscape/Electrical Pipes

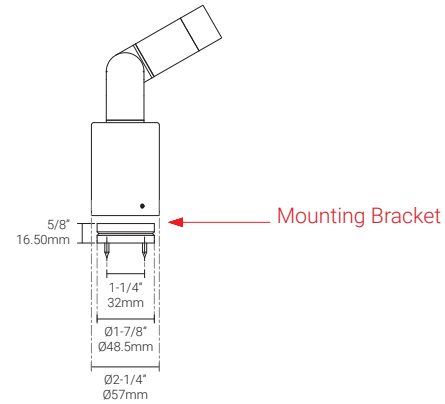
Canopy & Mounting Bracket



Fixture with Canopy

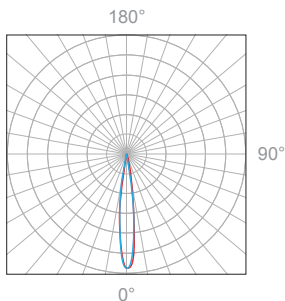


Dimensions



1W, 3000K, 90+ CRI,

Polar Candela Distribution



Beam Width: 12°

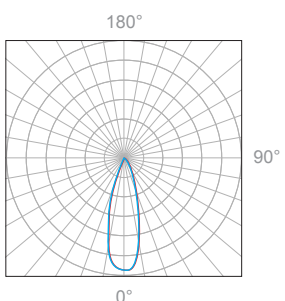


Illuminance at a Distance

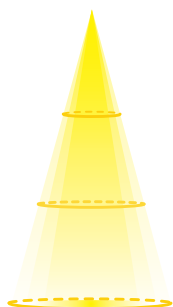
Distance		Center Beam fc	Beam Width			
3.0ft	0.91m	50.3fc	1.0ft	0.30m	1.0ft	0.30m
6.0ft	1.83m	12.6fc	2.1ft	0.64m	2.1ft	0.64m
9.0ft	2.74m	5.59fc	3.1ft	0.94m	3.1ft	0.94m
12.0ft	3.66m	3.14fc	4.1ft	1.25m	4.1ft	1.25m
15.0ft	4.57m	2.01fc	5.1ft	1.55m	5.1ft	1.55m
18.0ft	5.49m	1.40fc	6.2ft	1.89m	6.2ft	1.89m

Delivered Lumen: 65 lm
 ■ Vertical Beam Spread: 19.4°
 ■ Horizontal Beam Spread: 19.4°

Polar Candela Distribution



Beam Width: 30°



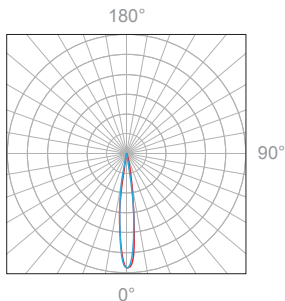
Illuminance at a Distance

Distance		Center Beam fc	Beam Width			
3.0ft	0.91m	35.1fc	1.5ft	0.46m	1.5ft	0.46m
6.0ft	1.83m	8.78fc	3.1ft	0.95m	3.1ft	0.95m
9.0ft	2.74m	3.90fc	4.6ft	1.40m	4.6ft	1.40m
12.0ft	3.66m	2.19fc	6.1ft	1.86m	6.1ft	1.86m
15.0ft	4.57m	1.40fc	7.6ft	2.31m	7.7ft	2.34m
18.0ft	5.49m	0.98fc	9.2ft	2.80m	9.2ft	2.80m

Delivered Lumen: 75 lm
 ■ Vertical Beam Spread: 28.5°
 ■ Horizontal Beam Spread: 28.7°

2W, 3000K, 90+ CRI

Polar Candela Distribution



Beam Width: 12°

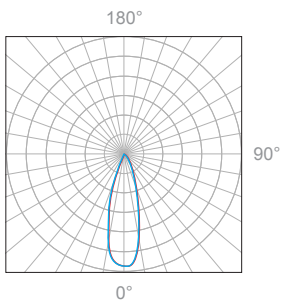


Illuminance at a Distance

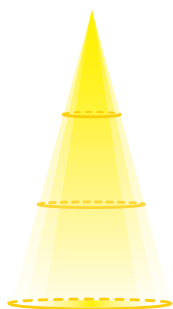
Distance		Center Beam fc	Beam Width			
3.0ft	0.91m	103fc	1.0ft	0.30m	1.0ft	0.30m
6.0ft	1.83m	25.9fc	2.0ft	0.61m	2.0ft	0.61m
9.0ft	2.74m	11.5fc	3.0ft	0.91m	3.0ft	0.91m
12.0ft	3.66m	6.47fc	4.0ft	1.22m	4.0ft	1.22m
15.0ft	4.57m	4.14fc	5.0ft	1.52m	5.0ft	1.52m
18.0ft	5.49m	2.87fc	6.0ft	1.83m	6.0ft	1.83m

Delivered Lumen: 129 lm
 ■ Vertical Beam Spread: 19.0°
 ■ Horizontal Beam Spread: 19.0°

Polar Candela Distribution



Beam Width: 30°



Illuminance at a Distance

Distance		Center Beam fc	Beam Width			
3.0ft	0.91m	69.5fc	1.5ft	0.46m	1.5ft	0.46m
6.0ft	1.83m	17.4fc	3.0ft	0.91m	3.0ft	0.91m
9.0ft	2.74m	7.73fc	4.5ft	1.37m	4.5ft	1.37m
12.0ft	3.66m	4.35fc	6.0ft	1.82m	6.0ft	1.82m
15.0ft	4.57m	2.78fc	7.6ft	2.31m	7.6ft	2.31m
18.0ft	5.49m	1.93fc	9.1ft	2.77m	9.1ft	2.77m

Delivered Lumen: 149 lm
 ■ Vertical Beam Spread: 28.3°
 ■ Horizontal Beam Spread: 28.3°

Appendix

Mounting & Finish Options

B1



MA matte clear anodized

B2



MA matte clear anodized



BA black anodized



BZ bronze powder coated



S6 stainless steel 316

B3



MA matte clear anodized



BA black anodized



BZ bronze powder coated

M1



MA matte clear anodized

Shroud Options

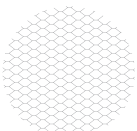


FS full shroud



WS wet location weep shroud

Accessories



ELB eggcrate louver, black



PS pipe stake, black



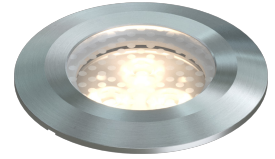
MB mounting bracket

L05

EXTERIOR | INTERIOR

In-grade | For ground, ceilings, walls, stairs

• Wet, Damp, and Dry location



Ordering Information

Clear Form

Date : _____

Quantity : _____

Project : _____

Note : _____

Type : _____

Specifications

Luminaire | Example Code: L05-3-W30H-F-F-[]-0-MK3-S-S6

Product	Version	CCT & CRI ¹	Beam Angle ²	Lens	Accessories ³ (optional)	Internal Angle Bracket ⁴	Mounting Kit ⁵ (optional)	Flange & Back Box ^{6,7,8}	Trim Finish ⁹
L05									
	3 1Wx3 7 2.5Wx3	W22S 2200K 80+ W27H 2700K 90+ W30H 3000K 90+ W35H 3500K 90+ W41H 4100K 90+	S spot 12° N narrow flood 30° F flood 60°	C clear F frosted CA clear anti-slip FA frosted anti-slip	HM2 hex louver, matte anodized HB2 hex louver, black anodized AB2 angled louver, black anodized SB2 straight louver, black anodized QB2 square louver, black anodized RB2 ring louver, black anodized	0 no angle 30 30° angle X custom	MK1 vertical surface MK3 in-ground	Octagonal Aluminum Back Box with : S standard flange depth 2-1/2" (65mm) P paving stone flange depth: 4-1/2" (114mm) NB no back box or flange	Aluminum Finishes: MA matte clear anodized BA black anodized BZ bronze powder coated Stainless Steel Finishes: S6 stainless steel 316 BTO black stainless steel Other Finishes: ABZ antique bronze

System Components (Ordered Separately)

Remote Driver : _____

* Consult MP Lighting Website or Factory.

Important Notes

Specification

- Refer to pg.2 - for Light Quality and Colour Consistency.
- See Light Distribution section for illustration of different combinations of beam angles and angle bracket.
- Louvers will be below the lens. AB2/SB2/QB2/RB2/NB2 only available without Internal Angle Bracket.
- Internal angle bracket is factory set, and cannot be field adjusted. 5° increments to maximum of 30° without accessories. Maximum 15° angle with accessories.
- Mounting kit is ordered separately. Please consult factory.
- For components included, refer to Luminaire Construction section.

- For custom box and flange options, consult MP factory.
- Paving stone flange is also recommended for a better cement/concrete flow.
- Different finish options are only applicable to trim ring and not for LED module housing. Refer to Appendix or MP Lighting website for complete look of luminaire with different trim finish options.

Warranty Notes & Disclaimer

Malfunction and damage to product due to incompatible dimming system or misuse will not be covered under warranty. Consult MP Lighting for recommended drivers. If the fixture has an option to be installed with a dimming control system, consult a dimming system manufacturer with minimum load before installing. MP Lighting reserves the right, at its sole discretion, at any time and without notice, to make design changes to any of our products. Consult MP Lighting website for most updated documentation.

L05

EXTERIOR | INTERIOR

In-grade | For ground, ceilings, walls, stairs

• Wet, Damp, and Dry location



Performance

Wattage	Forward Current	Power Consumption Budget per fixture (including driver)	LED output (Source)	Fixture Output (Delivered)
3W	350mA	3.9W	330 lm	262.5-286.5 lm
7.5W	700mA	9W	825 lm	468.8-493.4 lm

Application

Environment	Dry / Damp / Wet Location approved. IP 66.
Drive Over Rating	9,700 lbs (4,400 kg).
Mounting	<p>Recessed: Designed to be cast into earth, gravel, or concrete or inserted into paving stones or pavers. Included backbox, flange and level for direct burial or casting applications.</p> <p>MK1 mounting kit (optional): Recommended for easy installation on vertical surfaces (e.g. stair risers, walls), and downward-facing surfaces (e.g. ceilings, soffits). See "Mounting Options & Dimensions," or visit MK1</p> <p>MK3 mounting kit (optional): Recommended for thicker concrete slab and paving stone in-ground installation. Custom rectangular electrical box option is available for stair riser&wall installation. See "Mounting Options & Dimensions," or visit MK3</p>

Electrical

Power Supplies	Remote LED drivers (120-277V AC input, constant current output): Fixtures to be wired in series. Remote LED drivers (120-277V AC input, constant voltage output): Fixtures to be wired in parallel.
Control	<p>On/off control.</p> <p>Dimming: ELV or 0-10V dimming with appropriate drivers.</p> <p>Other options (consult factory): TRIAC/MLV, DMX, DALI, Casambi, Power over Ethernet.</p>

Luminaire Construction

LED Light Source	<p>W22S = CCT: 2200K, CRI (Ra): 80+, Colour Consistency: 3SDCM</p> <p>W27H = CCT: 2700K, CRI (Ra): 90+, Colour Consistency: 2SDCM</p> <p>W30H = CCT: 3000K, CRI (Ra): 90+, Colour Consistency: 2SDCM</p> <p>W35H = CCT: 3500K, CRI (Ra): 90+, Colour Consistency: 3SDCM (Contact factory for 2SDCM option)</p> <p>W41H = CCT: 4100K, CRI (Ra): 90+, Colour Consistency: 3SDCM</p>
Weight	2.56 lbs (1.16 kg).
Material	Fixture: machined marine-grade aluminum or machined stainless steel (316) with tempered glass.
Supplied with	<p>Standard installation housing: Comes with an octagonal back box, a flange, an integral leveling device, a plastic cap, gel filled wire nuts, and silicone grease.</p> <p>Cable: 6" (152mm) factory-installed wire lead.</p>
Warranty & LED Life	5 years limited warranty. Estimated useful life of LED is 50,000 hours.

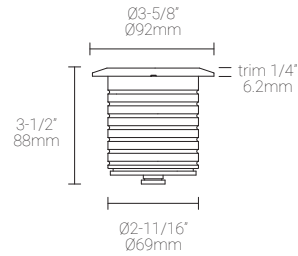
Ordered Separately

System Components	<p>Power supplies: remote driver</p> <p>Please consult factory or visit Recommended Drivers for available driver options.</p> <p>Mounting kits: MK1 or MK3 (custom length rebar in MK3 supplied by contractors)</p>
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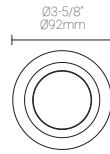
Mounting Options & Dimensions

LED Insert Dimensions

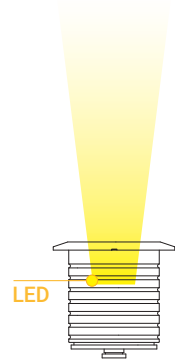
Fixture



Top View

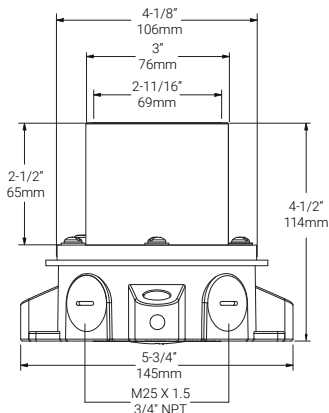


3D View

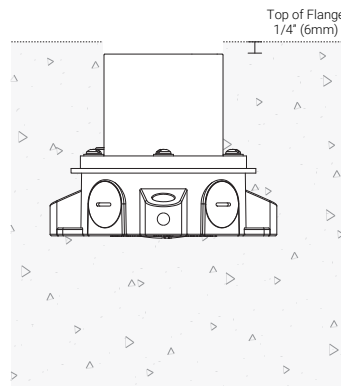


In-ground Installation (shown with MP Lighting Back Box | Order Code: **EBX-OCT1-DSMA**)

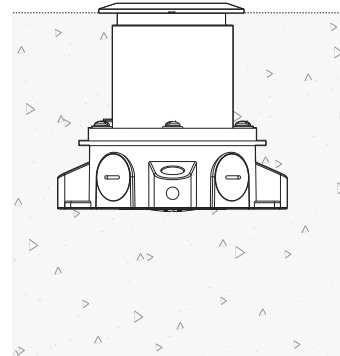
Box with Standard Flange



Box with Standard Flange:
During Concrete Installation

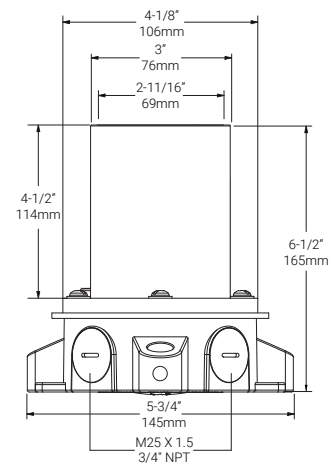


Box with Standard Flange:
Complete Concrete Installation

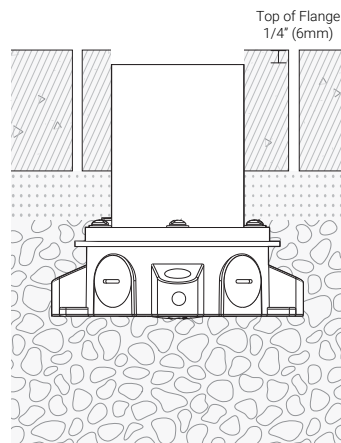


In-ground Installation (shown with MP Lighting Back Box | Order Code: **EBX-OCT1-DPMA**)

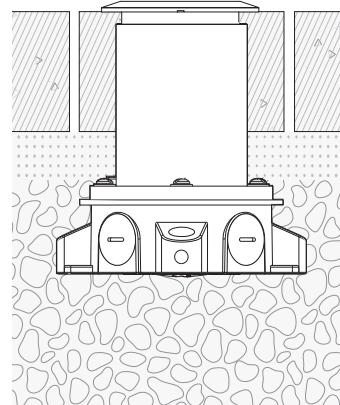
Box with Paving Stone Flange:



Box with Paving Stone Flange:
During Paving Stone Installation



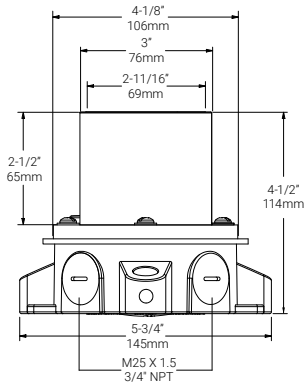
Box with Paving Stone Flange:
Complete Paving Stone Installation



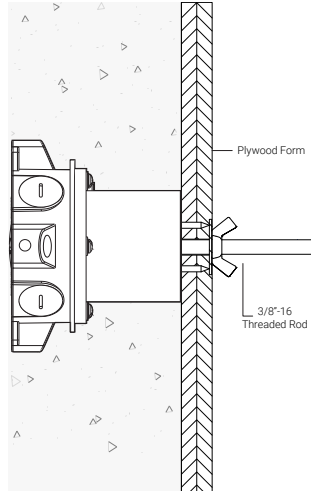
Mounting Kits

MK1: Ceiling, Wall, and Stair Riser Installation (shown with MP Lighting Back Box)

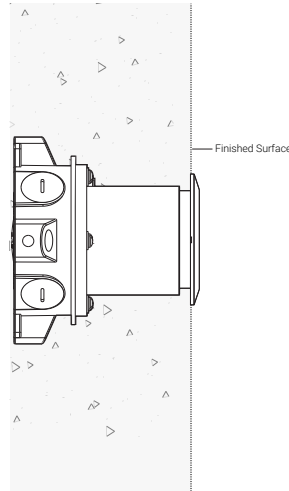
Box with Standard Flange



Box with Standard Flange & MK1:
During Installation

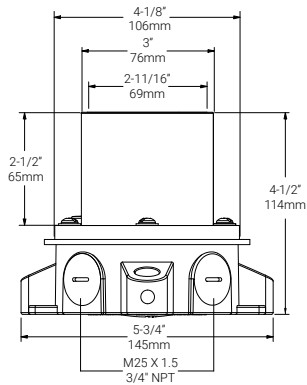


Box with Standard Flange:
Complete Installation

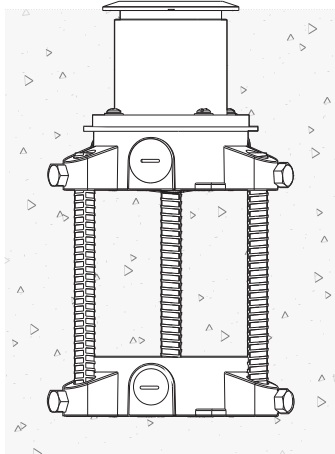


MK3: In-ground Installation (shown with MP Lighting Back Box)

Standard Flange and Back Box

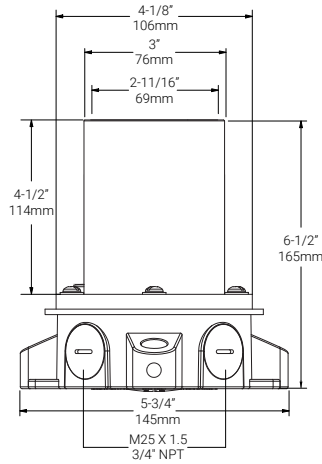


MK3 with Standard Flange and
Back Box

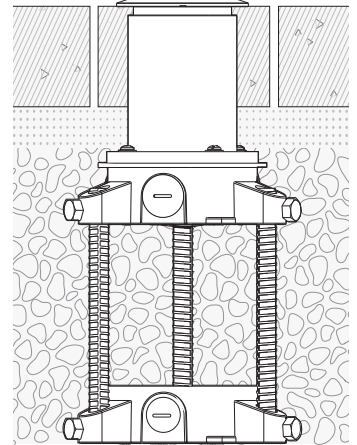


Rebar supplied by others.
Recommended size: Ø1/2"

Paving Stone Flange and Back
Box

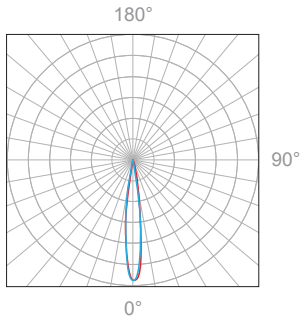


MK3 with Paving Stone Flange
and Back Box



Rebar supplied by others.
Recommended size: Ø1/2"

Polar Candela Distribution



Beam Width: 12°

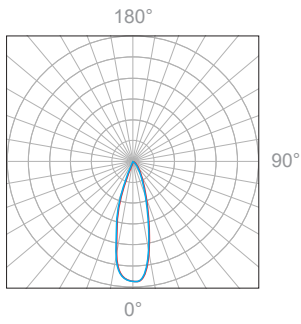


Illuminance at a Distance

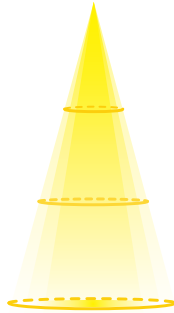
Distance		Center Beam	Beam Width			
3.0ft	0.91m	343fc	0.7ft	0.21m	0.7ft	0.21m
6.0ft	1.83m	85.7fc	1.4ft	0.42m	1.4ft	0.42m
9.0ft	2.74m	38.1fc	2.2ft	0.67m	2.1ft	0.64m
12ft	3.66m	21.4fc	2.9ft	0.88m	2.9ft	0.88m
15ft	4.57m	13.7fc	3.6ft	1.09m	3.6ft	1.09m
18ft	5.49m	9.52fc	4.3ft	1.31m	4.3ft	1.31m

Delivered Lumen: 286.5 lm
 ■ Vertical Beam Spread : 13.7°
 ■ Horizontal Beam Spread : 13.6°

Polar Candela Distribution



Beam Width: 30°

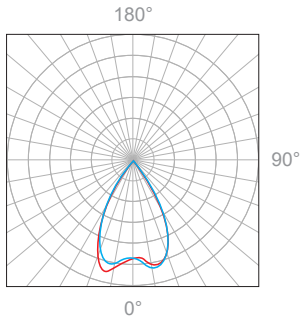


Illuminance at a Distance

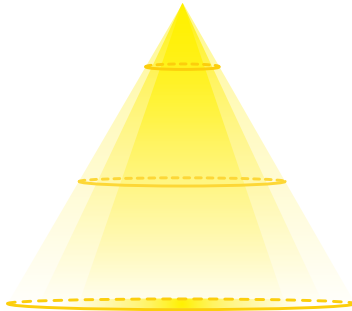
Distance		Center Beam	Beam Width			
3.0ft	0.91m	221fc	1.0ft	0.30m	1.1ft	0.33m
6.0ft	1.83m	53.1fc	2.0ft	0.61m	2.1ft	0.64m
9.0ft	2.74m	23.6fc	3.0ft	0.91m	3.2ft	0.97m
12ft	3.66m	13.3fc	4.0ft	1.22m	4.2ft	1.28m
15ft	4.57m	8.50fc	5.0ft	1.52m	5.3ft	1.61m
18ft	5.49m	5.90fc	6.0ft	1.82m	6.3ft	1.92m

Delivered Lumen: 272.2 lm
 ■ Vertical Beam Spread : 18.9°
 ■ Horizontal Beam Spread : 19.9°

Polar Candela Distribution



Beam Width: 60°

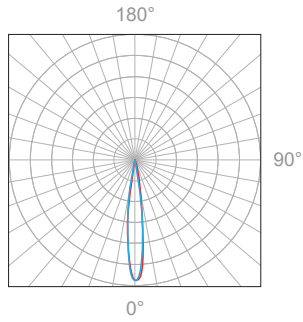


Illuminance at a Distance

Distance		Center Beam	Beam Width			
3.0ft	0.91m	43.1fc	2.3ft	0.70m	2.1ft	0.64m
6.0ft	1.83m	10.8fc	4.7ft	1.43m	4.2ft	1.28m
9.0ft	2.74m	4.78fc	7.0ft	2.13m	6.4ft	1.95m
12ft	3.66m	2.69fc	9.4ft	2.86m	8.5ft	2.59m
15ft	4.57m	1.72fc	11.7ft	3.56m	10.6ft	3.23m
18ft	5.49m	1.20fc	14.0ft	4.26m	12.7ft	3.87m

Delivered Lumen: 262.5 lm
 ■ Vertical Beam Spread : 42.6°
 ■ Horizontal Beam Spread : 38.9°

Polar Candela Distribution



Beam Width: 12°

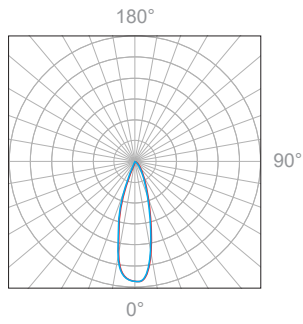


Illuminance at a Distance

Distance		Center Beam	Beam Width			
3.0ft	0.91m	595fc	0.7ft	0.21m	0.7ft	0.21m
6.0ft	1.83m	149fc	1.4ft	0.42m	1.4ft	0.42m
9.0ft	2.74m	66.1fc	2.1ft	0.64m	2.1ft	0.64m
12ft	3.66m	37.2fc	2.8ft	0.85m	2.8ft	0.85m
15ft	4.57m	23.8fc	3.6ft	1.09m	3.5ft	1.06m
18ft	5.49m	16.5fc	4.3ft	1.31m	4.2ft	1.28m

Delivered Lumen: 493.4 lm
 ■ Vertical Beam Spread : 13.5°
 ■ Horizontal Beam Spread : 13.4°

Polar Candela Distribution



Beam Width: 30°

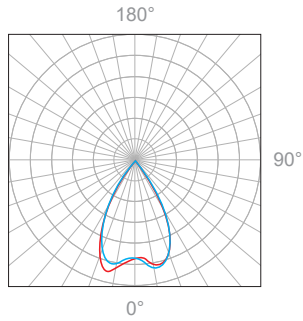


Illuminance at a Distance

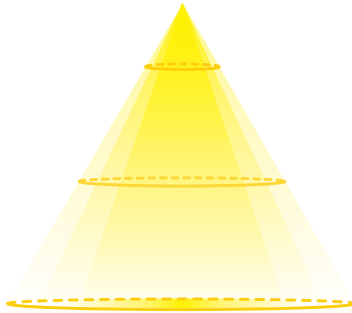
Distance		Center Beam	Beam Width			
3.0ft	0.91m	381fc	1.0ft	0.30m	1.0ft	0.30m
6.0ft	1.83m	95.1fc	2.0ft	0.61m	2.1ft	0.64m
9.0ft	2.74m	42.3fc	3.0ft	0.91m	3.1ft	0.94m
12ft	3.66m	23.8fc	4.0ft	1.22m	4.2ft	1.28m
15ft	4.57m	15.2fc	5.0ft	1.52m	5.2ft	1.58m
18ft	5.49m	10.6fc	6.0ft	1.82m	6.3ft	1.92m

Delivered Lumen: 488.1 lm
 ■ Vertical Beam Spread : 19.0°
 ■ Horizontal Beam Spread : 19.8°

Polar Candela Distribution



Beam Width: 60°



Illuminance at a Distance

Distance		Center Beam	Beam Width			
3.0ft	0.91m	76.5fc	2.3ft	0.70m	2.1ft	0.64m
6.0ft	1.83m	19.1fc	4.6ft	1.40m	4.2ft	1.28m
9.0ft	2.74m	8.50fc	6.9ft	2.10m	6.4ft	1.95m
12ft	3.66m	4.78fc	9.2ft	2.80m	8.5ft	2.59m
15ft	4.57m	3.06fc	11.5ft	3.50m	10.6ft	3.23m
18ft	5.49m	2.12fc	13.9ft	4.23m	12.7ft	3.87m

Delivered Lumen: 468.8 lm
 ■ Vertical Beam Spread : 42.1°
 ■ Horizontal Beam Spread : 38.9°

Appendix

Aluminum Finishes



MA matte clear anodized



BA black anodized



BZ bronze powder coated

Stainless Steel Finishes



S6 stainless steel 316



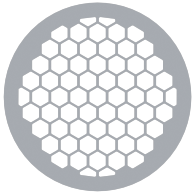
BTO black stainless steel

Other Materials



ABZ antique bronze

Accessories



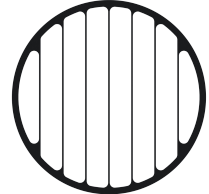
HM2 hex louver, matte clear anodized



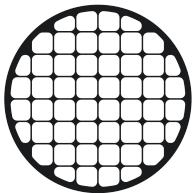
HB2 hex louver, black anodized



AB2 angled louver, black anodized



SB2 straight louver, black anodized

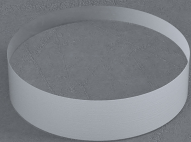


QB2 square louver, black anodized

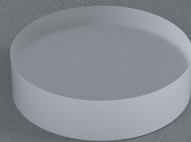


RB2 ring louver, black anodized

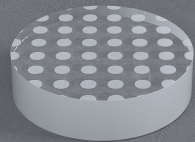
Lens Options



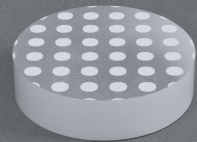
C clear



F frosted



CA clear anti-slip



FA frosted anti-slip

WAC LIGHTING

Mod

6" Outdoor Wall Sconce 3000K

Fixture Type: _____
Catalog Number: _____
Project: _____
Location: _____

Model & Size	Color Temp	Finish	LED Watts	LED Lumens	Delivered Lumens
WS-W65607 6"	3000K	BK Black BZ Bronze GH Graphite WT White	17W	1165	662

Example: **WS-W65607-WT**

For custom requests please contact customs@wacighting.com

FEATURES

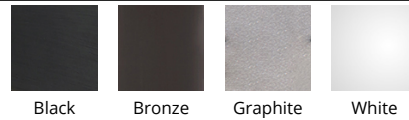
- Weather resistant powder coat finish
- Low profile with effective path illumination
- Light engine is factory sealed for maximum protection from the elements
- Driver concealed within the fixture
- 5 year warranty

SPECIFICATIONS

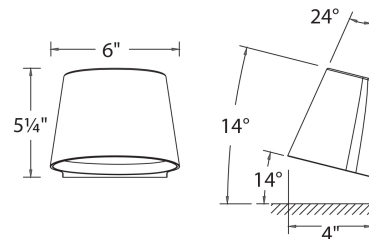
Color Temp:	3000K
Input:	120-277V,50/60Hz
CRI	90
Dimming:	ELV: 100-5% , 0-10V: 100-5% , TRIAC: 100-5%
Rated Life:	70,000 Hours
Mounting:	Can be mounted on wall in all orientations
Standards:	ETL, cETL, IP65, Title 24 JA8 Compliant, ADA, Wet Location Listed
Construction	Aluminum hardware with glass diffuser



FINISHES:



LINE DRAWING:



WS-W65607