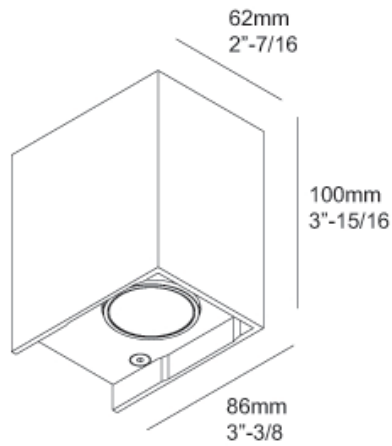
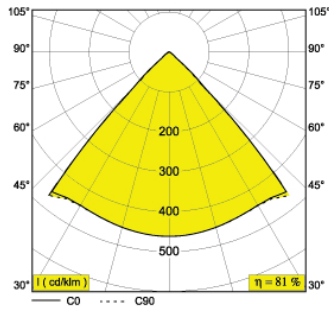


MONO LED WW

6 223 11 4102



© Delta Light



Available colors : ALU GREY / GREY BROWN

INCL.1 x POWERLED WHITE 7W / CRI>80 / 3000K / 525lm

INCL.1 x LENS

INCL.LED POWER SUPPLY 350mA-DC

Weight : 1.3 LBS

Protection Level : IP55

OPTIONS :

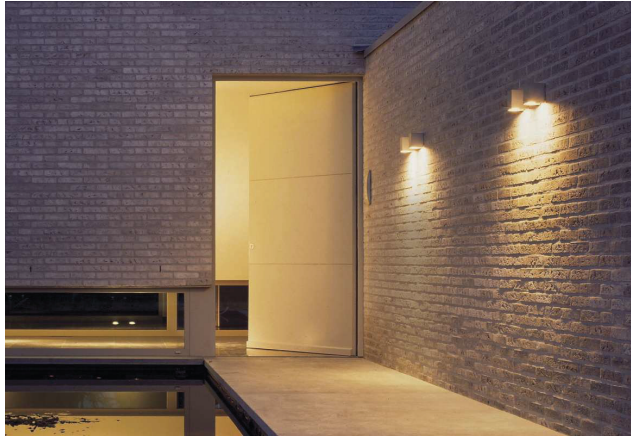
MUD KIT 2

COVERPLATE S 117

For detailed installation instructions, please consult the manual.

MONO LED WW

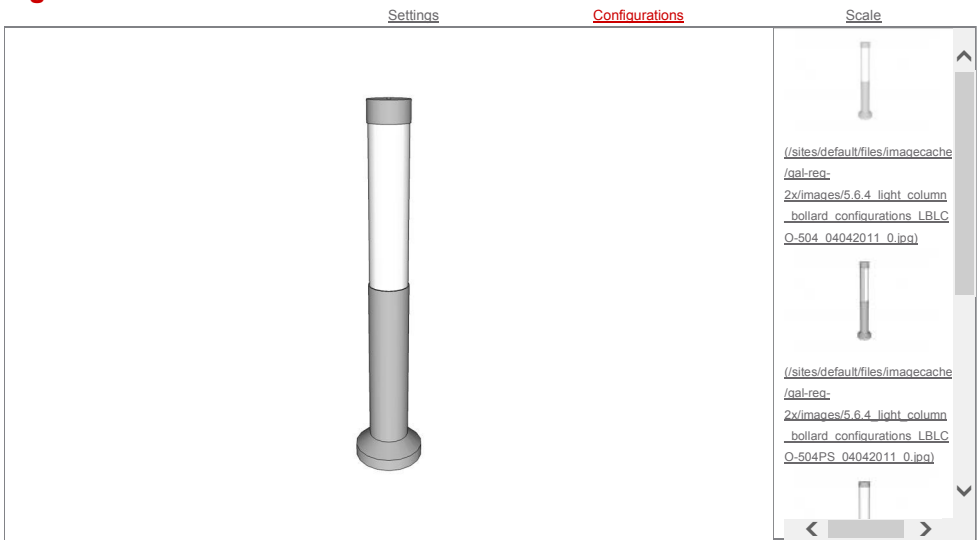
6 223 11 4102



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Light Column Bollard



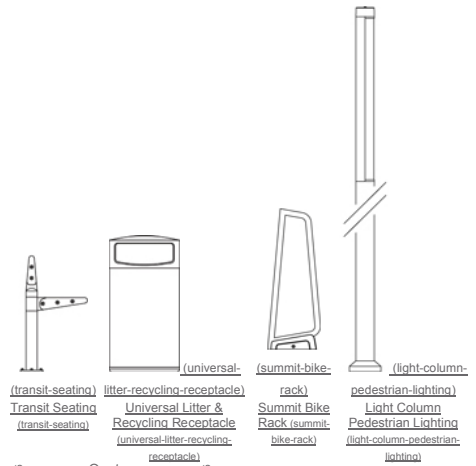
Light Column Bollard, series 500

Light Column Bollard Overview

Our Light Column Bollard provides simplicity, ruggedness and easy integration into a range of settings.

- Stainless Steel construction
- Satin finish; durable powdercoat finish available
- Columns available in 5" or 6" diameters
- (4) 10W T8 linear LED, (2) 14W T5 or (2) 24W T5HO linear fluorescent lamps
- Fixtures can be specified with a symmetrical lighting pattern or with a 180° perforated shield
- Standard and custom shields available
- Security bollard option features internal security core to protect against vehicle infringement; also available non-illuminated
- UL, C-UL, ETL and C-ETL listed
- High recycled content; highly recyclable

Related Products



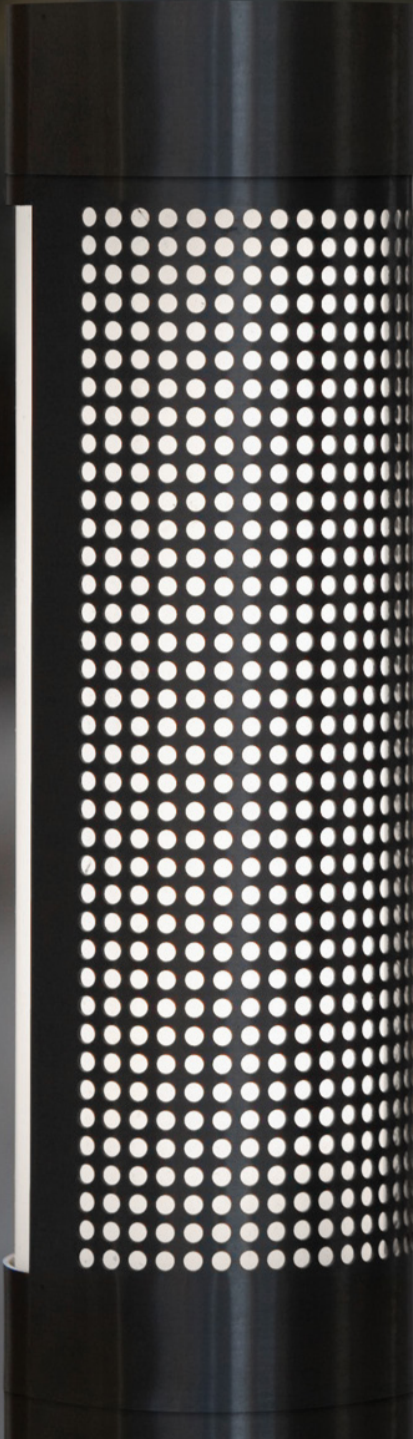
[Related Materials](#) | [Environmental Data](#) | [CSI Specs](#) | [Quote & Requests](#) | [Ordering](#)

[SketchUp Models](#) | [Installation & Maintenance](#) | [Brochures](#) | [VIEW](#) | [DOWNLOAD](#)



LIGHT COLUMN BOLLARD

PRODUCT DATA





LIGHT COLUMN BOLLARD



PRODUCT DATA

Sleek in stainless steel, the versatile **Light Column Bollard** readily integrates into a wide range of settings and offers numerous design possibilities. Bollard columns are available in 5" or 6" diameters. Illumination options include linear LED or linear fluorescent lamps and multiple ways to direct light: no shield for symmetrical lighting, or 180° and 360° shields in standard or custom designs. Non-illuminated variations, bollards with an embedded security core, and matching Light Column Pedestrian Lighting create a cohesive look and round out the functional potential.

MATERIAL & CONSTRUCTION DETAILS

INSTALLATION & MAINTENANCE

CONFIGURATIONS	MATERIALS & FINISHES	LAMPS & BALLASTS	INSTALLATION
<ul style="list-style-type: none"> Light Column Bollards are available in two sizes. Series 500 columns use 5" (127 mm) diameter tubular stainless steel; Series 600 columns use 6" (152 mm) diameter tubular stainless steel. To complement the illuminated bollard, a non-illuminated version is also available in both Series 500 and Series 600. Non-illuminated bollards can be specified with a removable base. 	<ul style="list-style-type: none"> Illuminated bollards have a tubular stainless steel column, white acrylic lens, and a stainless steel head cap. Non-illuminated bollards are tubular stainless steel with welded stainless steel cap. Standard stainless steel finish is Satin. Optional powdercoat colors from the F+S color chart and custom RAL colors are available for an upcharge. 	<ul style="list-style-type: none"> Linear fluorescent lamps are available in two options. See lamp information on pages 4 and 5. Ballast is an electronic, thermally protected, 120/277V combination for two F14T5 lamps, -18°C starting temperature, <10% THD, Class A sound rating. Please call for HO ballast specifications. 	<ul style="list-style-type: none"> Standard mounting is surface mount with J-bolts. Base plate is slotted for rotational capability. Security bollards use an embedded security core, available with the Series 600, for an upcharge. Non-illuminated bollards have the option of a removable base. Necessary hardware and templates are included for all mounting options.
WEIGHT	SHIELD OPTIONS	LEDS & DRIVERS	MAINTENANCE
<ul style="list-style-type: none"> Series 500, illuminated: 30 lbs (14 kg); non-illuminated: 32-33 lbs (15 kg) Series 600, illuminated: 34 lbs (15 kg); non-illuminated: 34-39 lbs (15-18 kg) Series 600, security core, illuminated: 170 lbs (77 kg); non-illuminated: 177 lbs (80 kg) 	<ul style="list-style-type: none"> Three standard shield designs are available for an upcharge. Refer to page 3 for details. Custom shield designs with either 180° or 360° coverage are also available. Shields are offered for Series 500 and Series 600 illuminated bollards. 	<ul style="list-style-type: none"> Linear LED lamps are available for Series 600 illuminated bollards. See pages 4 and 5 for additional details. LED driver input power is 85-277V. 	<ul style="list-style-type: none"> Metal surfaces can be cleaned as needed using a soft cloth or brush with warm water and a mild detergent. Avoid abrasive cleaners.

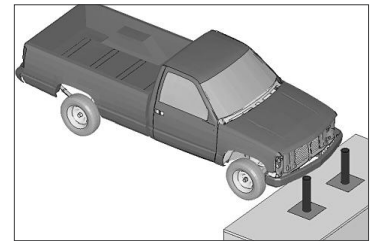
OPTIONAL SECURITY CORE

Site security is a major concern in today's unpredictable world. Public and private buildings, government facilities, campuses and public parks are all susceptible to accidental, as well as deliberate vehicle infringement. Design professionals, city planners, facilities managers and engineers must now be increasingly sensitive to the safety and security requirements of public and private spaces. Security bollards placed at ingress points are an excellent way to guard against vehicle infringement while still allowing pedestrian access.

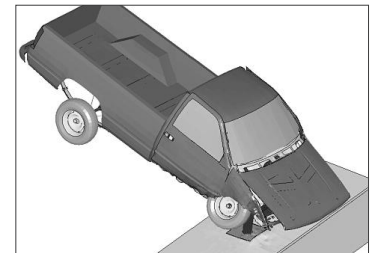
Until recently, security bollards have frequently taken the form of generic pipes or cylinders that offer little in the way of design or lighting functionality. Now, an optional enhancement to our Light Column Bollards provides a solution that blends security, performance and style. By adding a pre-engineered security core to our Series 600 design, we're able to respond to the needs of today's public spaces with a beautiful illuminated bollard that meets stringent high-impact crash requirements.

Forms+Surfaces' security bollards have been tested using a Finite Element Analysis (FEA) by a professional engineering consultant. FEA is a software-based tool commonly used in the automotive industry and used extensively for crash test simulations. Tests were performed using our bollards set in permanent concrete footings spaced 42" apart (to assure a minimum of two bollards being hit) and struck by a vehicle at a 90 degree impact. The impact simulation found the bollards to meet a level of K2.7 impact kinetic energy, which is equivalent to stopping a 5,500 lb. vehicle traveling at a minimum test velocity of 40 mph.

In addition to our illuminated security bollards, we can also provide non-illuminated options. Refer to page 6 for details. Please contact us to discuss design and installation considerations for Light Column Bollards with security cores.



Crash scenario with 5,500 lb pickup truck approaching embedded bollard system at 40 mph



Full-scale crash 330ms after impact

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LIGHT COLUMN BOLLARD

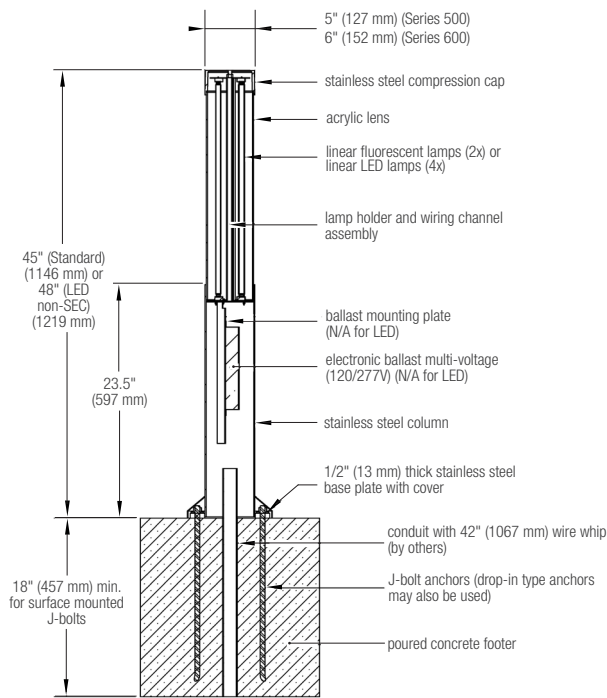


PRODUCT DATA

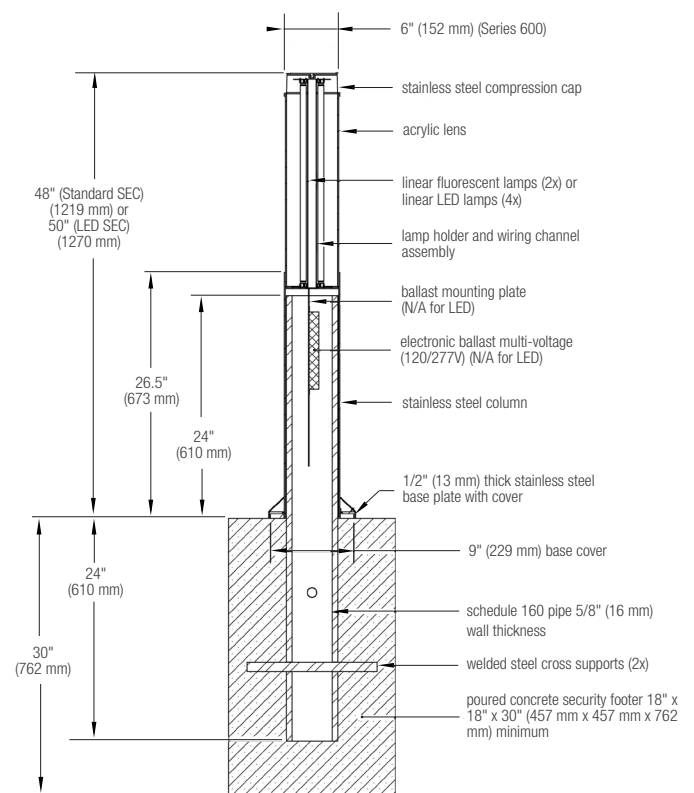
ILLUMINATED BOLLARDS

NOMINAL DIMENSIONS

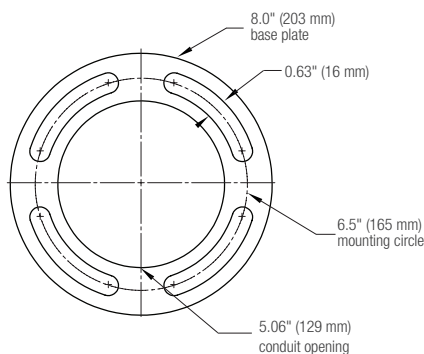
SURFACE MOUNT WITH J-BOLTS



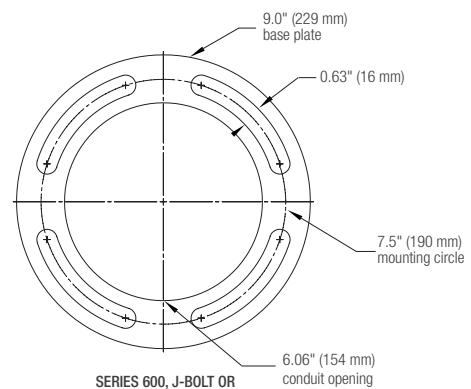
EMBEDDED SECURITY CORE



BASE PLATE MOUNTING DETAILS



SERIES 500, J-BOLT OR SECURITY CORE BASE



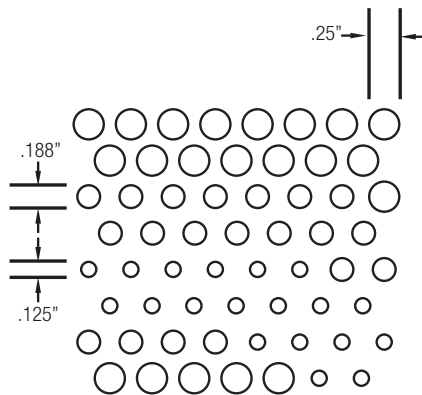
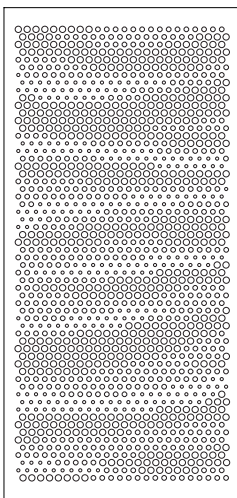
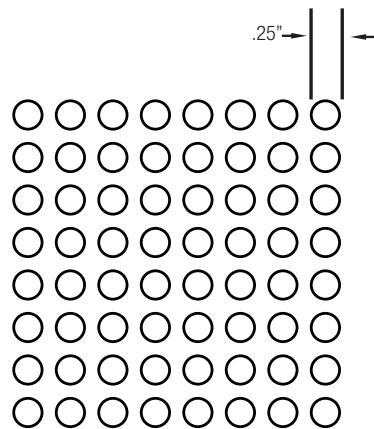
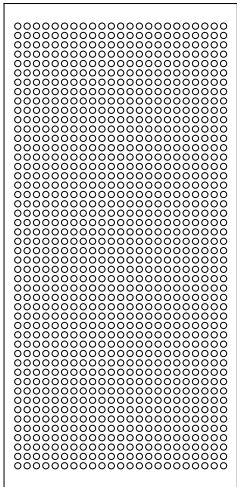
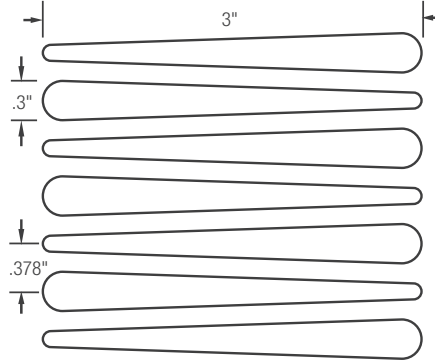
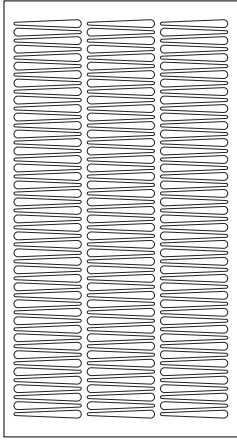
SERIES 600, J-BOLT OR SECURITY CORE BASE



LIGHT COLUMN BOLLARD

PRODUCT DATA

STANDARD SHIELD DESIGNS



KENTE

	Series 500	Series 600
180 Bollard	N/A	•
360 Bollard	N/A	N/A
180 Pedestrian	N/A	•
360 Pedestrian	N/A	N/A

PERFORATED

	Series 500	Series 600
180 Bollard	•	•
360 Bollard	•	•
180 Pedestrian	•	•
360 Pedestrian	•	•

SCAPE

	Series 500	Series 600
180 Bollard	•	•
360 Bollard	•	•
180 Pedestrian	•	•
360 Pedestrian	•	•

NOTE: A "•" indicates that the shield design is available in the selected series and size combination.

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LIGHT COLUMN BOLLARD



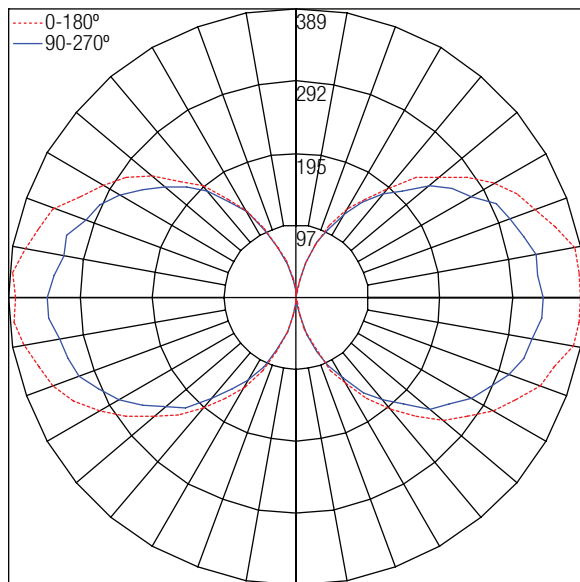
PRODUCT DATA

LAMP DESCRIPTIONS

TYPE	LAMP	DESCRIPTION	BASE	COLOR TEMPERATURE	LAMP LUMENS
Fluorescent	(2) F14T5	14W T5 linear fluorescent	Mini bi-pin	4,100K	2 x 1,350
	(2) F24T5/HO	24W T5HO linear fluorescent	Mini bi-pin	4,100K	2 x 1,800
LED	4K LED	10W T8 linear LED	Medium bi-pin	4,000 - 4,500K	4 x 1,000

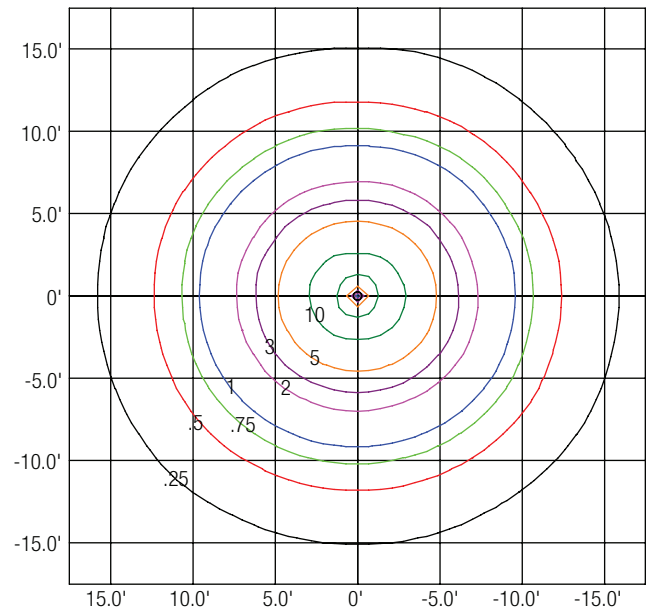
NOTE: Shielded designs are available upon request. Please see Lighting Plots in our Technical Drawings & IES Files on our website to view Light Column Bollard Polar Candela and Isofootcandle Plots.

POLAR CANDELA PLOT (24W FLUORESCENT)



Polar Candela Plot shows luminous intensity distribution through the specified vertical angles (above) with (2) 24W linear fluorescent mini bi-pin base lamps with no shield. IES files for standard lamps are available on our website.

ISOFOOTCANDLE PLOT (24W FLUORESCENT)



Isofootcandle Plot shows light distribution pattern at ground level with (2) 24W linear fluorescent mini bi-pin base lamps with no shield. Readings have been taken assuming the photometric center of the luminaire to be 2.75 feet above ground level. IES files for standard lamps are available on our website.

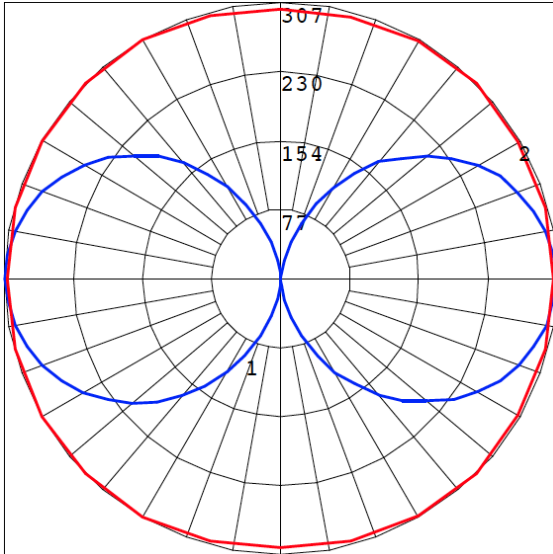


LIGHT COLUMN BOLLARD



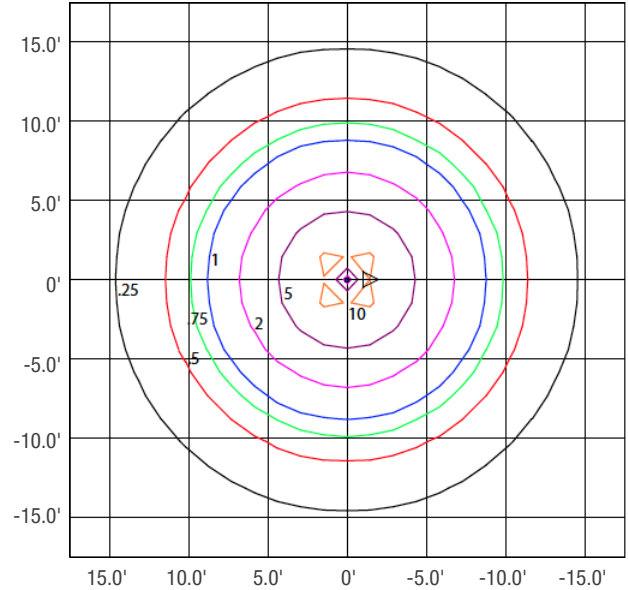
PRODUCT DATA

POLAR CANDELA PLOT (LED)



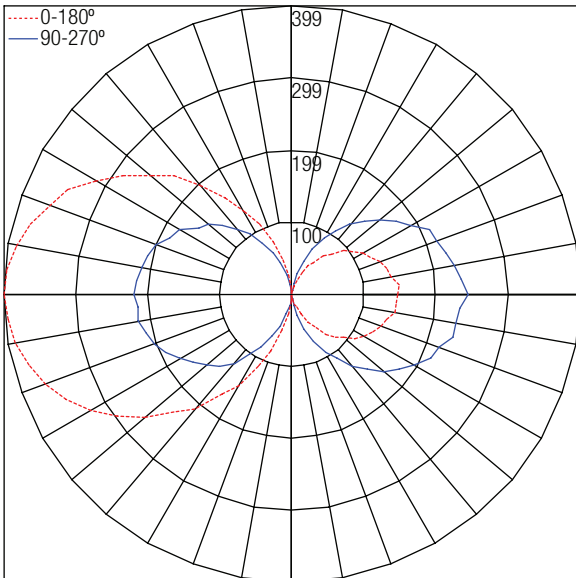
Polar Candela Plot shows luminous intensity distribution through the vertical and horizontal planes (above) with (4) 10W linear LED medium bi-pin base lamps with no shield. IES files for standard lamps are available on our website.

ISOFOOTCANDLE PLOT (LED)



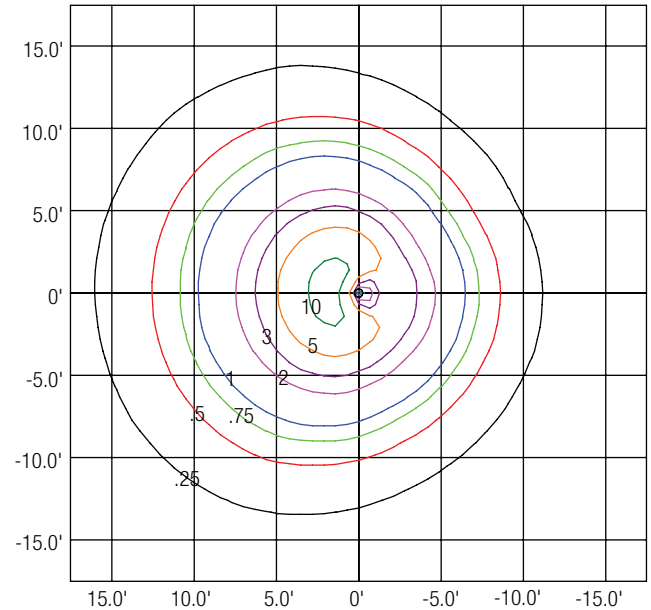
Isofootcandle Plot shows light distribution pattern at ground level with (4) 10W linear LED medium bi-pin base lamps with no shield. Readings have been taken assuming the photometric center of the luminaire to be 2.75 feet above ground level. IES files for standard lamps are available on our website.

POLAR CANDELA PLOT (FLUORESCENT, 180° PERF SHIELD)



Polar Candela Plot shows luminous intensity distribution (Cd/1000lm) for vertical plane through specified horizontal angles (above) with (2) 24W linear fluorescent mini bi-pin base lamps. IES files for standard lamps are available on our website.

ISOFOOTCANDLE PLOT (FLUORESCENT, 180° PERF SHIELD)



Isofootcandle Plot shows light distribution pattern at ground level with (2) 24W linear fluorescent mini bi-pin base lamps. Readings have been taken assuming the photometric center of the luminaire to be 2.75 feet above ground level. IES files for standard lamps are available on our website.

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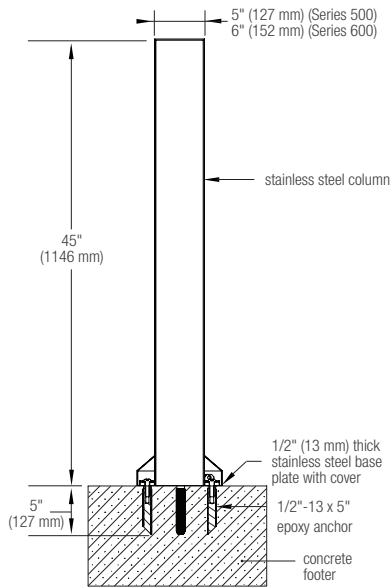
LIGHT COLUMN BOLLARD

PRODUCT DATA

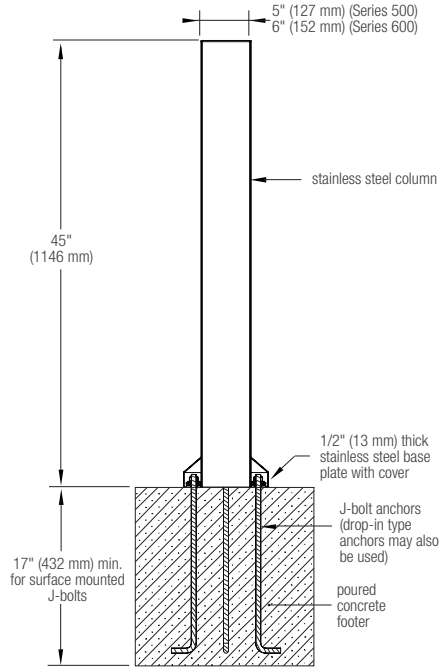
NON-ILLUMINATED BOLLARDS

NOMINAL DIMENSIONS

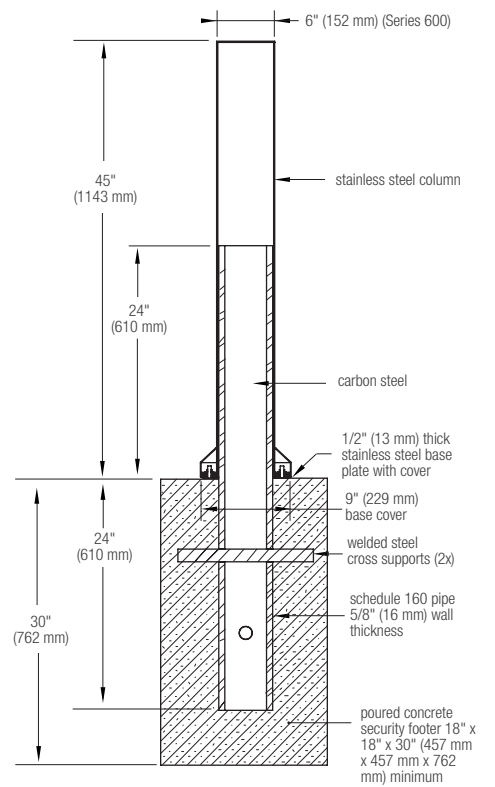
SURFACE MOUNT WITH REMOVABLE BASE



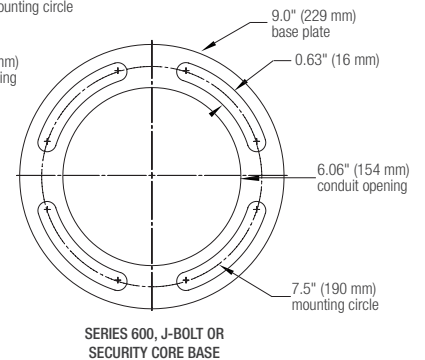
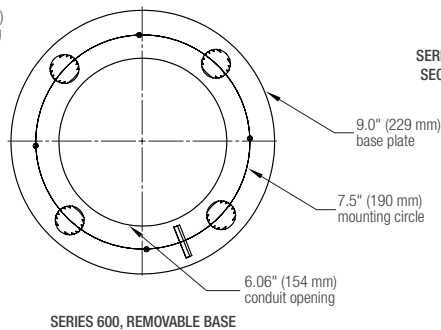
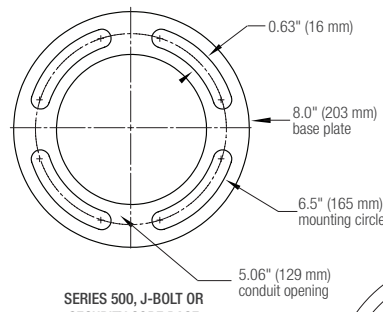
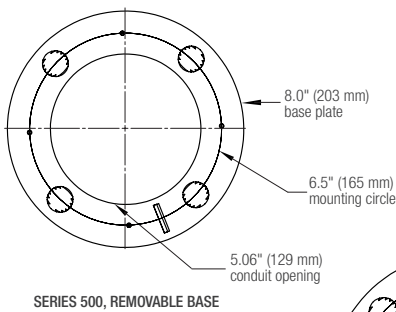
SURFACE MOUNT WITH J-BOLTS



EMBEDDED SECURITY CORE



BASE PLATE MOUNTING DETAILS



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LIGHT COLUMN BOLLARD



PRODUCT DATA

CERTIFICATIONS

- UL and C-UL listed for wet locations (linear fluorescent).
- ETL and C-ETL listed for wet locations (linear LED).

ENVIRONMENTAL CONSIDERATIONS

- Please refer to the Light Column Bollard Environmental Data Sheets for detailed environmental impact information.
- Light Column Bollard has high recycled content and is highly recyclable.
- Powdercoat finishes are no- or low-VOC, depending on color.
- Low maintenance.

NET PRICING AND ORDERING INFORMATION (pricing does not include freight)

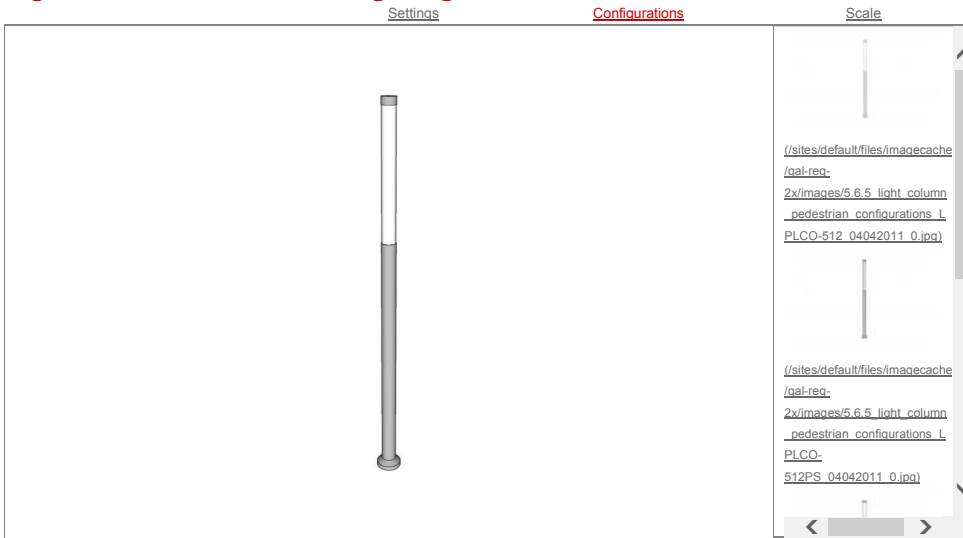
MODEL	DESCRIPTION	NET PRICE
LBLCO-504	Light Column Bollard, Series 500, illuminated	please call for pricing
LBLCO-604	Light Column Bollard, Series 600, illuminated	please call for pricing
LBLCO-504-N	Light Column Bollard, Series 500, non-illuminated	please call for pricing
LBLCO-604-N	Light Column Bollard, Series 600, non-illuminated	please call for pricing
	Optional embedded security core (available for Series 600)	please call for pricing
	Optional removable base (available for non-illuminated bollards)	please call for pricing
	180° perforated shield in standard designs	please call for pricing
	360° perforated shield in standard designs	please call for pricing
	180° custom shield (customer-supplied artwork)	please call for pricing
	360° custom shield (customer-supplied artwork)	please call for pricing
	Optional powdercoat color from Forms+Surfaces standard color chart	+ \$200 per color/per order
	Custom RAL powdercoat color	+ minimum \$500 per color/per order
	Custom fixture height	please call for pricing

TO ORDER SPECIFY: quantity, model, finish, lamp, shield (if applicable), and mounting.

LEAD TIME: 6 to 8 weeks. Shorter lead times may be available upon request. Please contact us to discuss your specific timing requirements.

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Light Column Pedestrian Lighting



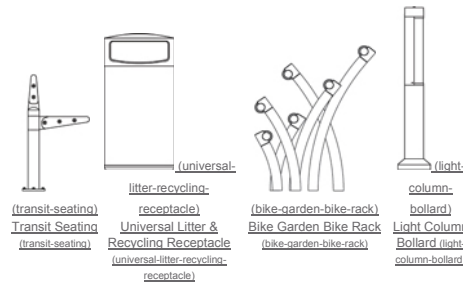
Light Column Pedestrian Lighting, series 500

Light Column Pedestrian Lighting Overview

Light Column Pedestrian Lighting fixtures are constructed entirely of stainless steel for a clean, simple look.

- Stainless Steel construction
- Satin finish; durable powdercoat finish available
- Columns available in 5" or 6" diameters
- (4) 28W T8 linear LED, (2) 32W T8 or (2) 48W T8/HO linear fluorescent lamps
- Fixtures can be specified with a symmetrical lighting pattern or with a 180° perforated shield
- Standard and custom shields available
- UL, ETL, C-UL and C-ETL listed
- High recycled content; highly recyclable

Related Products



Related Materials	Environmental Data	CSI Specs	Quote & Requests for Proposals
SketchUp Models	Installation & Maintenance	Brochures & Data Sheets	VIEW Light Column Pedestrian PDS 0.pdf DOWNLOAD



LIGHT COLUMN PEDESTRIAN

PRODUCT DATA





LIGHT COLUMN PEDESTRIAN

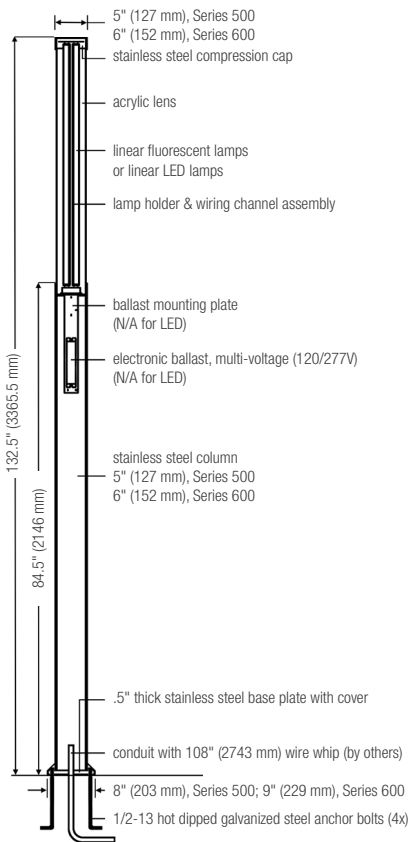


PRODUCT DATA

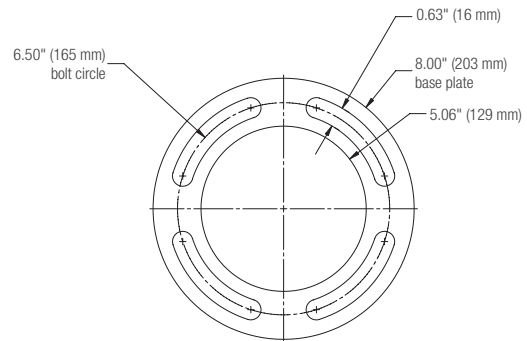
Sleek in stainless steel, the versatile **Light Column Pedestrian Lighting** readily integrates into a wide range of settings and offers numerous design possibilities. Fixtures are available in 5" or 6" diameters. Illumination options include linear LED or linear fluorescent lamps and multiple ways to direct light: no shield for symmetrical lighting, or 180° and 360° shields in standard or custom designs. Coordinating Light Column Bollards in illuminated, non-illuminated, and security core variations create a cohesive look and round out the functional potential.

MATERIAL & CONSTRUCTION DETAILS		INSTALLATION & MAINTENANCE	
COLUMN & HEAD <ul style="list-style-type: none"> Series 500 columns use 5" (127 mm) diameter tubular stainless steel; Series 600 columns use 6" (152 mm) diameter tubular stainless steel. Heads consist of a white acrylic lens and stainless steel head cap. 	FINISH <ul style="list-style-type: none"> Standard stainless steel finish is Satin. Optional powdercoat colors from the F+S color chart and custom RAL colors are available for an upcharge. 	LAMP <ul style="list-style-type: none"> Lamps are linear LED or linear fluorescent. See lamp information on pages 2 and 3. Linear LED lamps are only available in Series 600 columns. 	INSTALLATION <ul style="list-style-type: none"> Installation is surface mount. Base plate is slotted for rotational capability. Necessary hardware and templates are included.
SHIELD <ul style="list-style-type: none"> Three standard shield designs are available for an upcharge. Refer to page 2 for details. Custom shield designs with either 180° or 360° coverage are also available. 	WEIGHT <ul style="list-style-type: none"> Series 500: 65 lbs (29 kg) Series 600: 75 lbs (34 kg) 	BALLAST <ul style="list-style-type: none"> Electronic, thermally protected (universal input voltage) 120/277V for two F32T8, F48T8HO and equivalent T8 lamps with less than 10% THD & 0° F starting temp. 	MAINTENANCE <ul style="list-style-type: none"> Metal surfaces can be cleaned as needed using a soft cloth or brush with warm water and a mild detergent. Avoid abrasive cleaners.

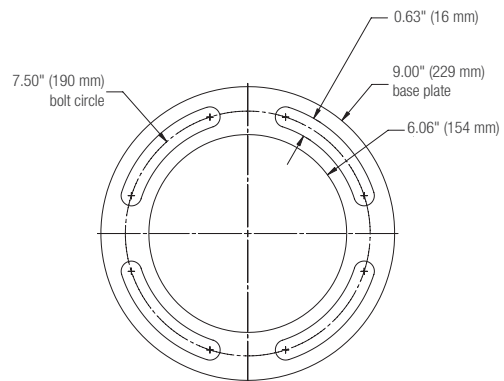
NOMINAL DIMENSIONS



BASE PLATE MOUNTING DETAIL (SERIES 500)



BASE PLATE MOUNTING DETAIL (SERIES 600)



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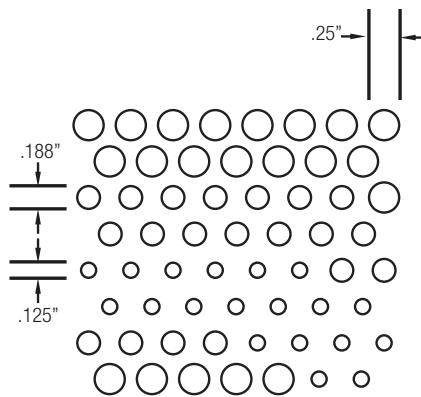
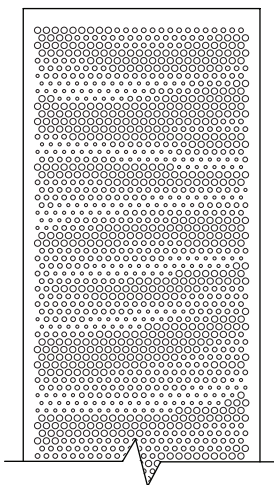
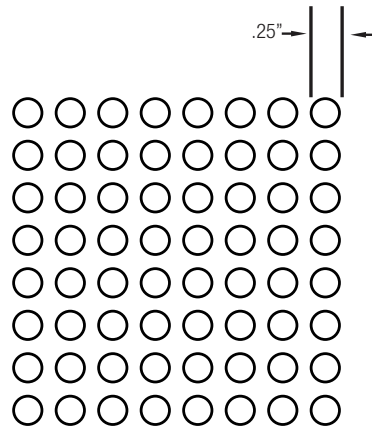
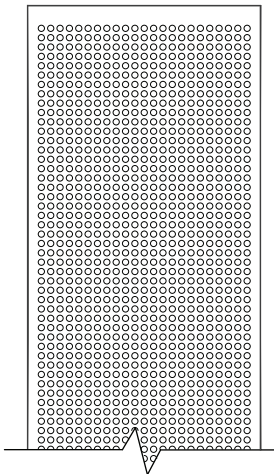
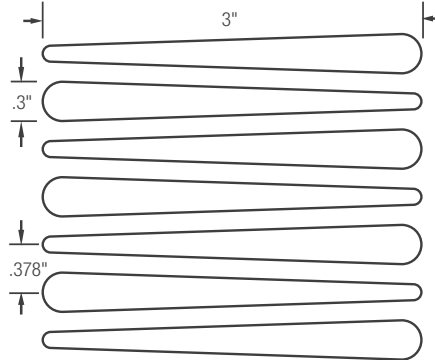
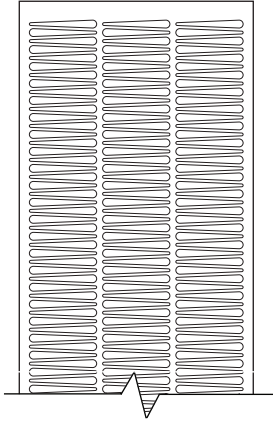


LIGHT COLUMN PEDESTRIAN



PRODUCT DATA

STANDARD SHIELD DESIGNS



KENTE

	Series 500	Series 600
180 Pedestrian	N/A	•
360 Pedestrian	N/A	N/A
180 Bollard	N/A	•
360 Bollard	N/A	N/A

PERFORATED

	Series 500	Series 600
180 Pedestrian	•	•
360 Pedestrian	•	•
180 Bollard	•	•
360 Bollard	•	•

SCAPE

	Series 500	Series 600
180 Pedestrian	•	•
360 Pedestrian	•	•
180 Bollard	•	•
360 Bollard	•	•

NOTE: A "•" indicates that the shield design is available in the selected series and size combination



LIGHT COLUMN PEDESTRIAN

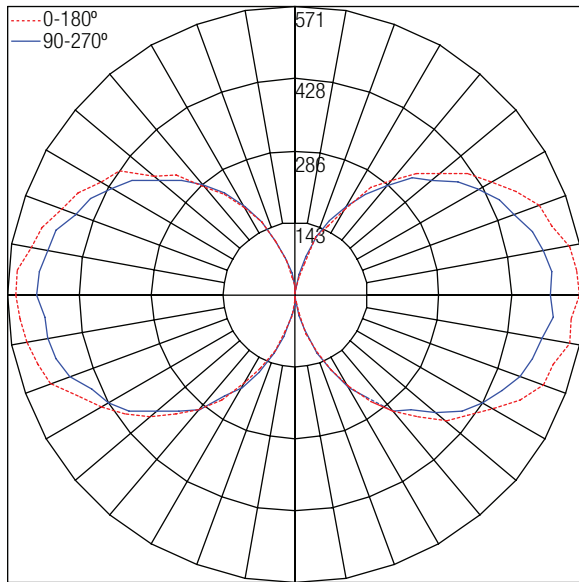
PRODUCT DATA

DESCRIPTIONS

TYPE	LAMP	DESCRIPTION	BASE	COLOR TEMPERATURE	LAMP LUMENS
LED (Series 600)	(4) L28T8	28W linear LED	Medium bi-pin	4,000-4,500K	4 x 2,400
Fluorescent	(2) F32T8	32W T8 linear fluorescent	Medium bi-pin	4,100K	2 x 2,900
	(2) F48T8/HO	48W T8/HO linear fluorescent	Recessed double	4,100K	2 x 4,000

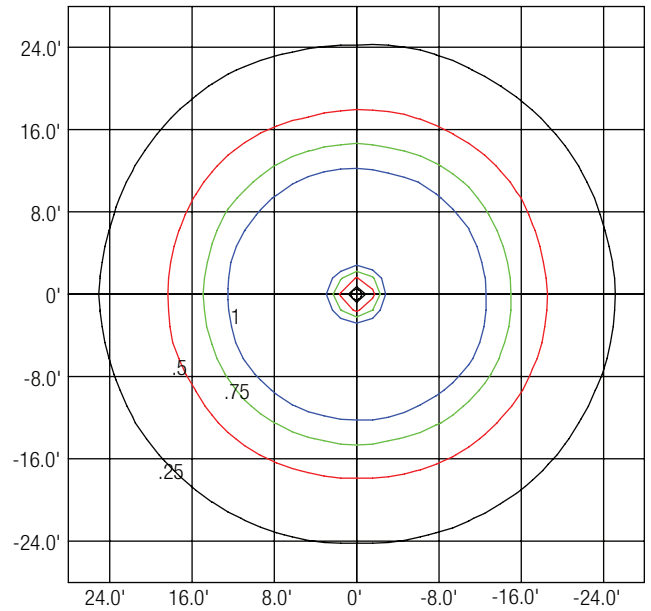
NOTE: Shielded designs are available upon request. IES files for standard and shielded lamp types are available on our website.

POLAR CANDELA PLOT (SERIES 500, 32W, FLUORESCENT, NS)



Polar Candela Plot shows luminous intensity distribution (Cd/1000lm) for vertical plane through specified horizontal angles (above) with (2) 32W linear fluorescent medium bi-pin base lamps. IES files for standard lamps are available on our website.

ISOFOOTCANDLE PLOT (SERIES 500, 32W FLUORESCENT, NS)



Isofootcandle Plot shows light distribution pattern at ground level with (2) 32W linear fluorescent medium bi-pin base lamps. Readings have been taken assuming the center of the luminaire to be 9.15 feet above ground level. IES files for standard lamps are available on our website.

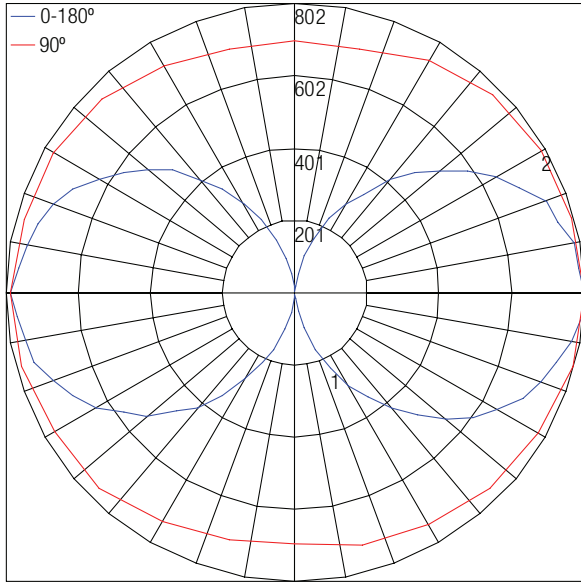


LIGHT COLUMN PEDESTRIAN



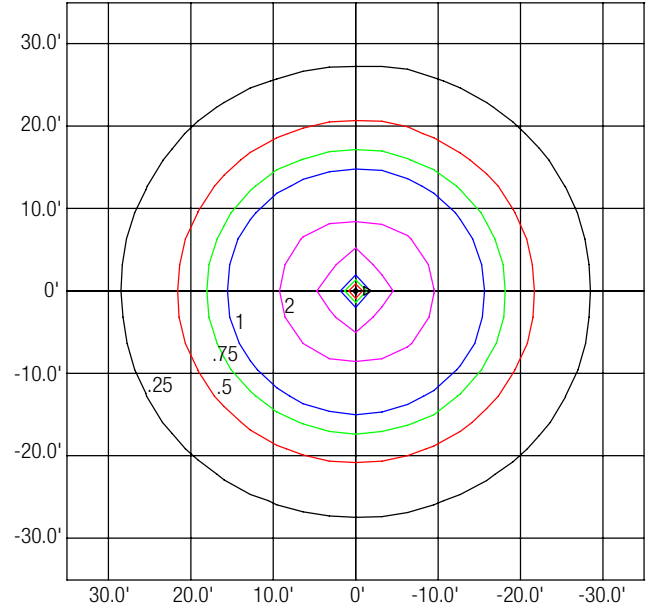
PRODUCT DATA

POLAR CANDELA PLOT (SERIES 600, 48W, FLUORESCENT, NS)



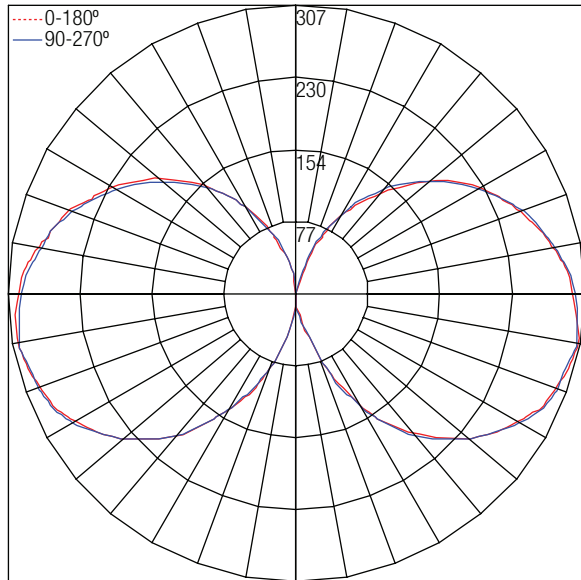
Polar Candela Plot shows luminous intensity distribution through the vertical and horizontal planes (above) with (2) 48W linear fluorescent recessed double base lamps. IES files for standard lamps are available on our website.

ISOFOOTCANDLE PLOT (SERIES 600, 48W, FLUORESCENT, NS)



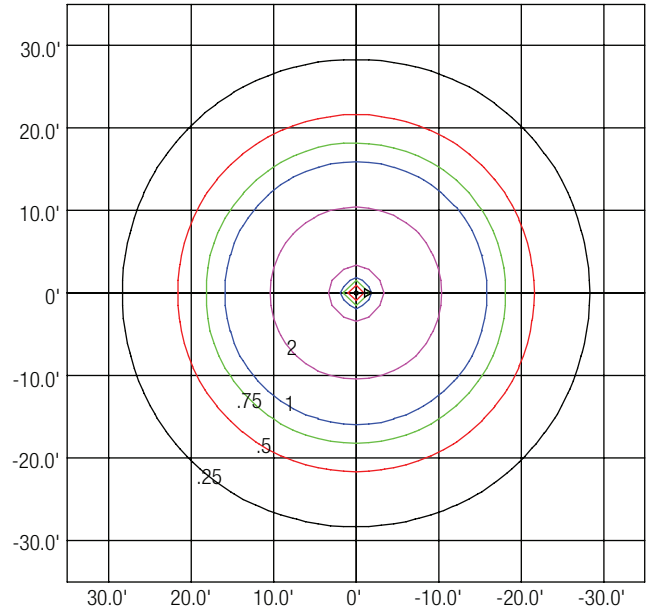
Isofootcandle Plot shows light distribution pattern at ground level with (2) 88W linear fluorescent recessed double base lamps. Readings have been taken assuming the center of the luminaire to be 9.0 feet above ground level. IES files for standard lamps are available on our website.

POLAR CANDELA PLOT (SERIES 600, LED, NS)



Polar Candela Plot shows luminous intensity distribution (Cd/1000lm) for vertical plane through specified horizontal angles (above) with (4) 28W linear LED medium bi-pin base lamps. IES files for standard lamps are available on our website.

ISOFOOTCANDLE PLOT (SERIES 600, LED, NS)



Isofootcandle Plot shows light distribution pattern at ground level with (4) 28W linear LED medium bi-pin base lamps. Readings have been taken assuming the center of the luminaire to be 9.0 feet above ground level. IES files for standard lamps are available on our website.

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LIGHT COLUMN PEDESTRIAN



PRODUCT DATA

CERTIFICATION

- UL and C-UL listed for wet locations.
- ETL and C-ETL listed for wet locations.

ENVIRONMENTAL CONSIDERATIONS

- Please refer to the Light Column Pedestrian Environmental Data Sheets for detailed environmental impact information.
- Light Column Pedestrian has high recycled content and is highly recyclable.
- Powdercoat finishes are no- or low-VOC, depending on color.
- Low maintenance.

NET PRICING AND ORDERING INFORMATION (pricing does not include freight)

MODEL	DESCRIPTION	NET PRICE
LPLCO-512	Light Column Pedestrian Series 500	please call for pricing
LPLCO-612	Light Column Pedestrian Series 600	please call for pricing
	180° perforated shield in standard designs	please call for pricing
	360° perforated shield in standard designs	please call for pricing
	180° custom shield (customer supplied artwork)	please call for pricing
	360° custom shield (customer supplied artwork)	please call for pricing
	Optional powdercoat color from Forms+Surfaces standard color chart	+ \$200 per color/per order
	Custom RAL powdercoat color	+ minimum \$500 per color/per order
	Custom fixture height	please call for pricing

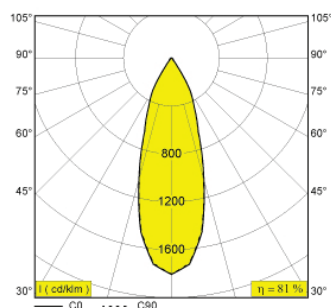
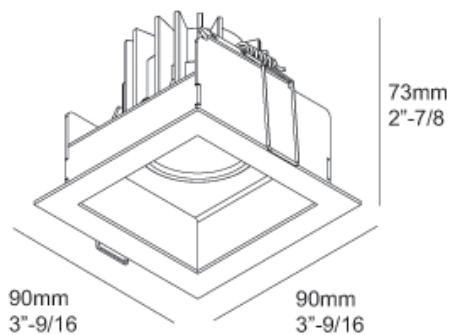
TO ORDER SPECIFY: quantity, model, finish, lamp, shield (if applicable).

LEAD TIME: 6 to 8 weeks. Shorter lead times may be available upon request. Please contact us to discuss your specific timing requirements.

CARREE X LED 3033 S1

6 202 20 28122

© Delta Light



Available colors : ALU GREY

FIXED

INCL.1 x POWERLED WHITE 7W / CRI>80 / 3000K / 660lm

INCL.1 x REFLECTOR FL-33°

INCL.PC CLEAR

EXCL.LED POWER SUPPLY 350mA-DC

Weight : 0.7 LBS

Protection Level : IP43/20

REQUIREMENTS :

IC AT S 350mA-DC 12W ED1 UNV PK 161

IC AT S 350mA-DC 11W ED8 120V PK 161

IC AT S 350mA-DC 10W 120V PK 161

PLASTERKIT 161

LED POWER SUPPLY 350mA-DC DIM

For detailed installation instructions, please consult the manual.

CARREE X LED 3033 S1

6 202 20 28122



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