

T899LED

LED SQUARE CUTOFF BOLLARD

JOB INFORMATION

Type: _____
 Catalog No: _____
 Project Name: _____
 Comments: _____

 Prepared by: _____

T899LED

FEATURES

USE OF PRODUCT

The intended use of this product is for pathways, parking lots, plazas, entrance ways, parks, and as landscape accents.

HOUSING

Extruded aluminum housing with flush mounting base and vandal resistant screws.

FINISH

Weather resistant, matt-finished powdercoat process for advanced protection in severe environments over a precise chromate conversion coating. Available in standard dark polyester bronze finish for impact, corrosion, and UV resistance. Consult factory for made to order architectural finishes.

OPTICS

White UV-stabilized polycarbonate cone reflector was designed for maximum photometric efficiency and optimum light distribution. Available in Clear or Frosted polycarbonate lens for increased UV-stabilize vandal resistances. One-piece silicon gasket prohibits entrance of outside contaminants. Provides 360° of low level lighting.

LED

High output LEDs offer a minimum estimated operating life of 50,000 hours in 3000K, 4000K(standard) with CRI>80. LEDs placed on high performance aluminum heatsink for reduced junction temperatures and extended life.

DRIVER

Durable and long lasting LED driver operates at 120-277V and boasts a 90% power factor at 50 to 60 Hz with 0-10V Dimming Constant Current. Driver protections includes: Output open load, over-current and short-circuit, and over-temperature with auto recovery. -30°C Min Temp. to 40°C Max Temp.

MOUNTING

- Mounting kit with anchor bolts are included.
- Internal ballast tray for easy maintenance.

LISTINGS/COMPLIANCE

- CSA-Suitable for wet locations

GFCI OUTLET



BOLLARD RETROFIT BASE KIT



LENS



ORDERING INFO

SERIES	HEIGHT	WATTAGE	VOLTAGE	COLOR TEMPERATURE	LENS	FINISH	OPTIONS
T899LED	35 - 35-3/4"	16 - 16W/1554lm	UNV - 120V-277V	30 - 3000K	C - Clear	BZ ² - Bronze	GO - GFCI Outlet
	MTO ¹ - Made to order	23 - 23W/2175lm	347 - 347V	40 - 4000K	F - Frosted	MTO ³ - Made to order	BRBK - Bollard retrofit base kit
		34 - 34W/3263lm	480 - 480V			MGTO ³ - Marin grade made to order	EM - Emergency battery CEM - Cold pack emergency battery

Notes

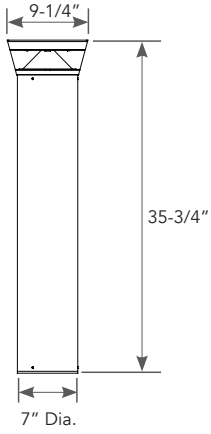
1. Consult factory for height, Minimum height 30"
2. Standard.
3. RAL number required.



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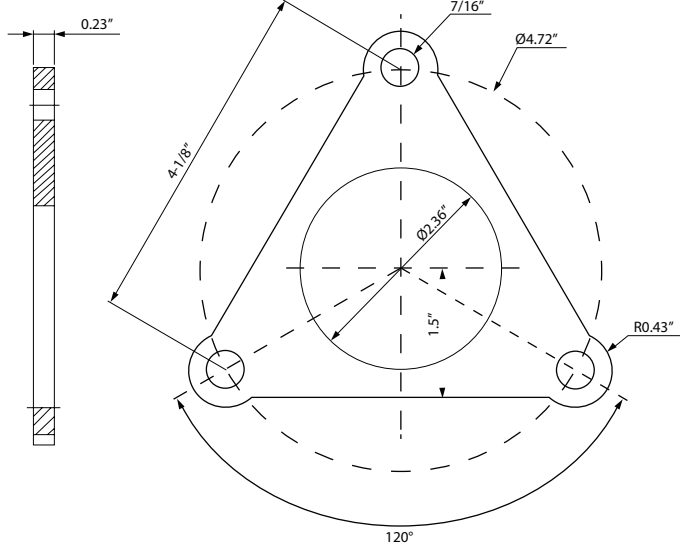
DIMENSIONS



B.U.G. RATING

Watts	Lumens	B-U-G Rating
16W	1554lm	B1-U3-G1
23W	2175lm	B1-U3-G1
34W	3263lm	B1-U4-G2

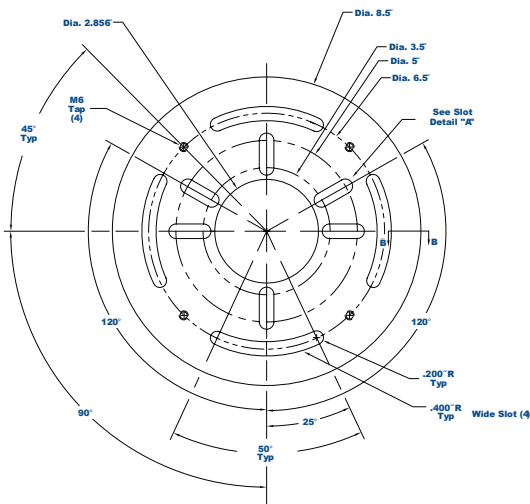
NEW CONSTRUCTION PLATE



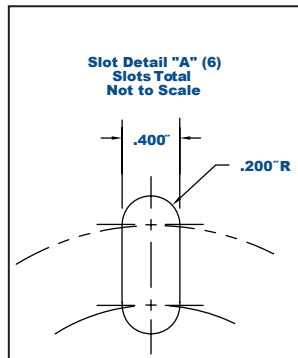
Technical Requirements:

1. No cracks, incomplete casting puffing, bubbles, or any perforative defects.
2. Unspecified chamfer is R2.
3. Remove glitches and sharp edges.
4. Draft angle is 1 degree.
5. Sureface treatment by customer's assignment.

BOLLARD RETROFIT BASE TEMPLATE



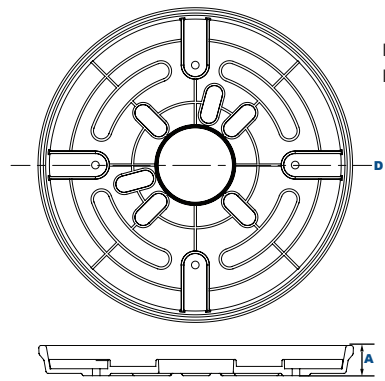
NOT TO SCALE



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BASE DIMENSIONS



Diameter (D): 10-3/4"
Height (A): 1"

BASE COVER DIMENSIONS

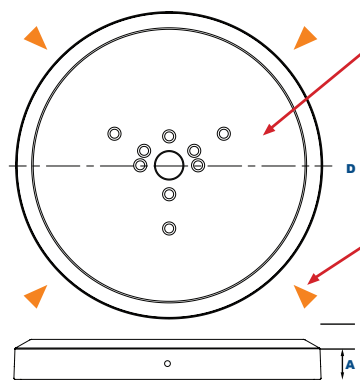


Plate has threaded holes in patterns for each bollard size/shape. Mounting bolts are included. bollard base mounts to plate.

Plate includes 4 set screws on sides at 90° for locking base cover to mounting plate. Fully rotatable.

Diameter (D): 11-1/2"
Height (A): 1-1/2"

BASE KIT INCLUDES

Heavy duty die cast aluminum Anchor Bolt Retrofit Adaptor Plate

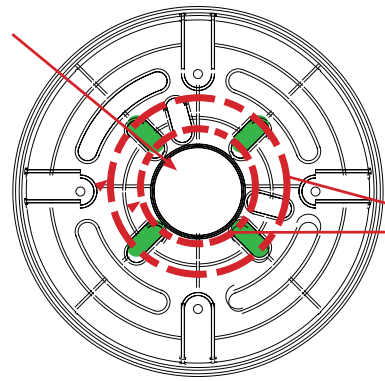
- Includes slots for existing anchor bolt mounting, 3@120°, 4@90° or 2@180° (3.5" to 5" diameter bolt circle). Slots can accommodate 1/4" to 3/8" diameter anchor bolts.
- Includes large diameter slots for installing field drilled anchors (not included) in the event that the existing anchor bolt pattern does not fit slots, or anchor bolts are damaged or unusable.
- Includes 4 Stainless Steel leveling bolts with two leveling bubbles at 90° to level base prior to mounting new bollard.
- Center conduit entrance hole designed to accommodate two 3/4" PVC conduits.

Heavy duty die cast aluminum Bollard Mounting Cover Plate

- Includes threaded holes in patterns to match bollard base mounting plates.
- Stainless Steel bolts for mounting bollard base plate.
- 4 Stainless Steel set screws at 90° for securing the cover plate to the adaptor plate. Cover plate can be rotated 360°. Powdercoat finish over chromate conversion coating in Bronze (standard) and available in made to order.

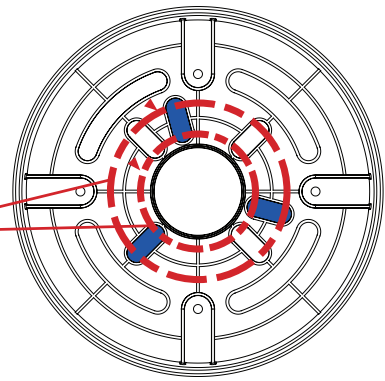
ANCHOR BOLT RETROFIT ADAPTER PLATE BOLT CIRCLES FOR USE WITH EXISTING ANCHOR BOLTS

Conduit Entrance area accommodates two 3/4" stub-ups.



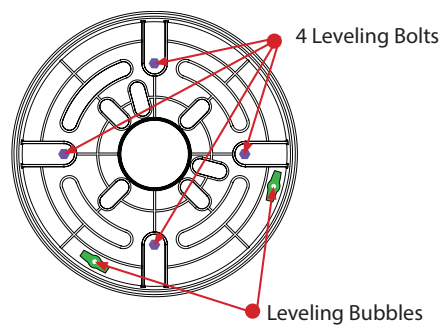
For use with 34 bolts @ 90° or
2 bolts @ 180°

Fits bolt circles from 3.5" to 5"



For use with 3 bolts @ 120°

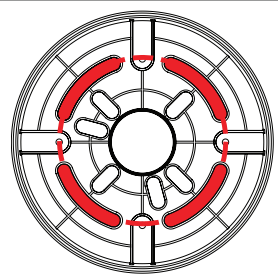
BASE LEVELING AND LEVELS



4 Leveling Bolts

Leveling Bubbles

CIRCLE FOR DRILLED ANCHORS



6.5" bolt circle for Drilled Anchors. Used when existing anchor bolts do not fit 4-bolt or 3-bolt slot or are damaged. these must be cut off and new drilled anchors installed

PHOTOMETRICS

20W

Test Date 8Aug18
 Series T895LED
 Lumens 2409
 Watts 26.4

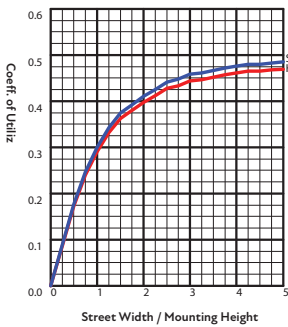
Characteristics

IES Classification:	Type VS
Longitudinal Classification:	Very short
Lumens Per Lamp:	N.A. (absolute)
Total Lamp Lumens:	N.A. (absolute)
Luminaire Lumens:	2409
Downward Total Efficiency:	N.A. (absolute)
Total Luminaire Efficiency:	N.A. (absolute)
Luminaire Efficacy Rating (LER):	91
Total Luminaire Watts:	26.4
Ballast Factor:	1.00
Upward Waste Light Ratio:	0.00
Maximum Candela:	556.339
Maximum Candela Angle:	140H 30V
Maximum Candela (<90 Degrees Vertical):	556.339
Maximum Candela Angle (<90 Degrees Vertical):	140H 30V
Maximum Candela At 90 Degrees Vertical:	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical:	277.158 (11.5% Luminaire Lumens)
Cutoff Classification (deprecated):	N.A. (absolute)

Luminaire classification system

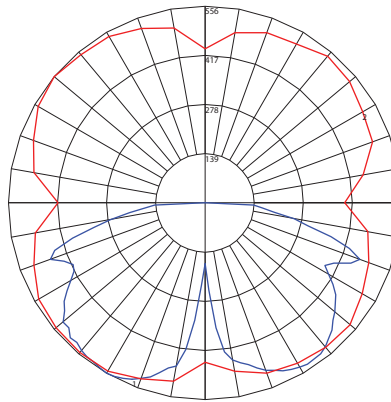
BUG RATING		B1 - U0 - G1	
FRONT LIGHT	LUMENS	% LAMP	% LUMINAIRE
LOW(0-30):	193.5	N.A.	8.0
MEDIUM(30-60):	523.5	N.A.	21.7
HIGH(60-80):	389.1	N.A.	16.2
VERY HIGH(80-90):	79.0	N.A.	3.3
BACK LIGHT			
LOW(0-30):	201.2	N.A.	8.4
MEDIUM(30-60):	544.2	N.A.	22.6
HIGH(60-80):	396.0	N.A.	16.4
VERY HIGH(80-90):	82.3	N.A.	3.4
UP LIGHT			
LOW(90-100):	0.0	N.A.	0.0
HIGH(100-180):	0.0	N.A.	0.0
TOTAL	2408.8	N.A.	100.0

Coefficients of utilization



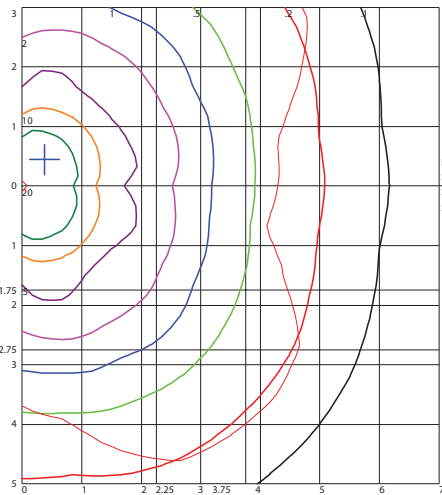
FLUX DISTRIBUTION			LUMENS	% LAMP
Downward Street Side:	1185.1	49.2		
Downward House Side:	1223.6	50.8		
Downward Total:	2408.7	100.0		
Upward Street Side:	0.0	0.0		
Upward House Side:	0.0	0.0		
Upward Total:	0.0	0.0		
Total Flux:	2408.7	100.0		

Polar graph



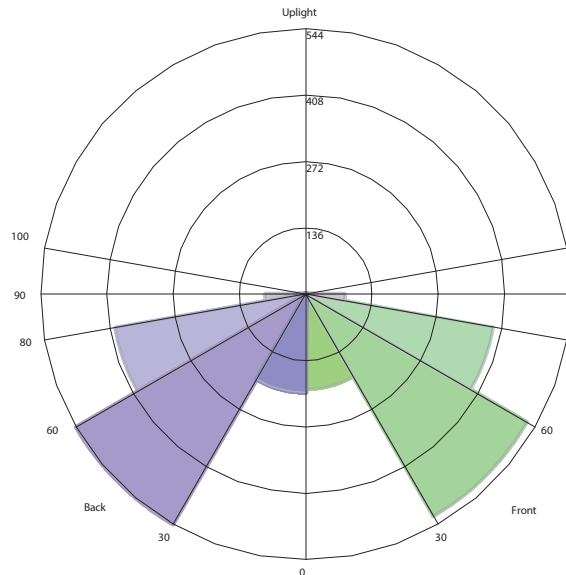
Maximum Candela = 556.339 Located At
 Horizontal Angle = 140, Vertical Angle = 30
 # 1 - Vertical Plane Through Horizontal Angles (140-320) (Through Max. Cd.)
 # 2 - Horizontal Cone Through Vertical Angle (30) (Through Max. Cd.)

Isofootcandle lines of horizontal illuminance



Distance In Units Of Mounting Height
 Values Based On 10 Foot Mounting Height
 1/2 Maximum Candela Trace Shown As Dashed Curve
 (+) = Maximum Candela Point

Luminaire classification system (lcs) graph



BUG RATING		B1 - U0 - G1
FRONT LIGHT	LUMENS	
LOW(0-30):	193.5	
MEDIUM(30-60):	523.5	
HIGH(60-80):	389.1	
VERY HIGH(80-90):	79.0	
BACK LIGHT		
LOW(0-30):	201.2	
MEDIUM(30-60):	544.2	
HIGH(60-80):	396.0	
VERY HIGH(80-90):	82.3	
UP LIGHT		
LOW(90-100):	0.0	
HIGH(100-180):	0.0	