

AGENDA
Cascade Charter Township
Downtown Development Authority Board of Directors
July 16, 2019
5:30 p.m.
Cascade Library Wisner Center
2870 Jacksmith Ave. SE

- ARTICLE 1.** Call the Meeting to Order
Record the Attendance

- ARTICLE 2.** Approval of the Agenda

- ARTICLE 3.** Approval of the Minutes of June 18, 2019 Meeting

- ARTICLE 4.** Acknowledge visitors and those wishing to speak to non-agenda items *(Comments are limited to five minutes per speaker)*

- ARTICLE 5.** Discuss and Consider Streetlight Options for Cascade Rd. Pathway

- ARTICLE 6.** Discuss DDA Streetlights – LED conversion

- ARTICLE 7.** Discuss and Consider Sponsorship for an Oktoberfest event

- ARTICLE 8.** Discuss Sign or Gateway Feature at Museum Gardens

- ARTICLE 9.** Any Other Business
 - a. Update on Planning Activities
 - b. Update on Community/DDA Events
 - a. Cascade Metro Cruise Warmup – August 22
 - b. Thursday Nights at the Library

- ARTICLE 10.** Adjournment

MINUTES

Cascade Charter Township
Downtown Development Authority Board of Directors
June 18, 2019
5:30 p.m.
Cascade Library Wisner Center
2870 Jacksmith Ave. SE

- ARTICLE 1.** Chairman Puplava called the meeting to order at 5:30 p.m.
Members Present: Beahan, Kingsland, Growney, DeWitt, Makkar, and Puplava.
Members Absent: Stephan, McNeil-Chapman, Siegle
Others Present: DDA Director Sandra Korhorn, and those listed on the sign in sheet.
- ARTICLE 2.** **Approve the Current Agenda.**
Motion was made by Member Beahan to approve the Agenda. Supported by Member DeWitt. Motion carried 5 to 0.
- ARTICLE 3.** **Approve the Minutes of May 10, 2019 Meeting.**
Motion was made by Member Beahan to approve the Minutes. Supported by Member DeWitt. Motion carried 5 to 0.
- ARTICLE 4.** **Acknowledge visitors and those wishing to speak to non-agenda items.**

No one came forward.
- ARTICLE 5.** **Update on Centennial Park Streetscape Project**

Director Korhorn stated that there have been 4 bids received for this project, with the lowest being \$606,000. Director Korhorn stated that the Board has approved this bid, and the contract has been awarded to Anlon. They have a 20-week window in which they can pick 10 weeks to complete the project within, likely with a mid-July start date.

There were no further questions or comments.

ARTICLE 6. Closed Session – To Discuss Potential Acquisition of Commercial Properties

Motion was made by Member Beahan to close the Regular Session Meeting at 5:34. Supported by Member DeWitt. Motion carried 5 to 0.

Closed Session discussion was held; documented separately as needed.

Motion was made by Member Beahan to close the Closed Session meeting at 5:54. Supported by Member Kingsland. Motion carried 5-0.

Motion was made by Member Beahan to reopen the Regular Session meeting at 5:54. Supported by Member Growney. Motion carried 5-0.

ARTICLE 7. Any Other Business

a. Update on Planning Activities

Director Korhorn stated that 22 people responded to the questionnaire for the ranking of DDA projects. The outdoor gathering space, and riverfront properties were heavily favored, followed by engaging property owners in the Village, filling in water and sewer lines, and more communication.

Member Makkar arrived at 6:05

Director Korhorn stated that Chick-fil-A is looking at the old Macaroni Grill property, and will likely be moving into the Township.

Director Korhorn reminded Members about the upcoming 4th of July and Metro Cruise Warm-Up events, and the Thursday night concerts and events at the Library.

ARTICLE 8. Adjournment

Motion was made by Member Makkar to adjourn. Supported by Member Growney. Motion carried 6 to 0. Meeting was adjourned at 6:15 p.m.

Respectfully submitted,
Diana Kingsland, Secretary

DRAFT

DDA MEMORANDUM

To: Cascade Township DDA Board

From: Sandra Korhorn, DDA/Economic Development Director *SKK*

Subject: Discuss and Consider Cascade Rd. Pathway and Streetlight Options

Meeting Date: July 16, 2019

The DDA portion of the Cascade Rd. pathway will be constructed from 28th Street to the Cascade Villa apartments. The path will be 7' wide and construction will be paid by the DDA. We will be installing streetlights in the area (on both sides of the road), similar to other areas of the DDA district.

We have asked the engineers to look for a fixture that looks similar to the Lumec lights we are currently using in the village and down 28th St. Attached are the cutsheets for Lumec alternative fixture manufacturers. I have also included a photograph of our existing Lumec lights so you can compare.

Be prepared to discuss the fixtures and consider an option for the construction project.











ALN540 – Towne Commons® LED | TYPE

All Luminaires shall accept 120 thru 277 volt input and have integral surge protection. Drivers shall be U.L recognized and have a 0-10v dimming interface with a dimming range of 10-100%. Approved dimmers include Lutron Diva AVTV, Lutron Nova NFTV and NTFTV. (Note: not compatible with current sourcing dimmers). Consult factory for current list of known compatible dimming systems. LifeShield™ shall be provided with all configurations for added protection in extreme temperature environments (-30°C to 60°C). The electrical assembly shall be mounted to a serviceable tray. The surge protector shall be U.L. recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave with a clamping voltage of 320V and surge rating of 372J. The surge protector case shall be a high-temperature, flame resistant plastic enclosure. The electrical assembly shall be installed and prewired in the fixture.

CONTROLS

SCP shall have an integral surge protection device with a current rating of 10,000 Amps using the industry standard 8/20uSec wave and sure rating of 372J

Sensor not intended for use with additional photo-control, wireless control or dimming systems.

SERVICING

The top of the fixture shall hinge open for relamping by loosening two stainless steel fasteners.

MOUNTING

Post top mounting: The fixture shall slip over a 4"/100mm O.D. pole or tenon and be secured to the pole with three (or six) stainless steel set screws.

Arm or wall mounting: The fixture shall be attached to the cast arm with three stainless steel bolts and a silicone gasket.

FINISH

Fixture finish shall consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 2604-02 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

CERTIFICATION

Fixtures shall be listed with ETL for outdoor, wet location use, conforming to the UL 1598 and Canadian CSA 22.2 no. 250 standard. IP54.

WARRANTY / TERMS AND CONDITIONS OF SALE

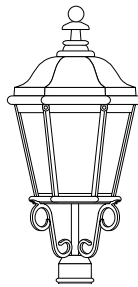
Download: <http://www.hubbelling.com/resources/warranty/>

AAL reserves the right to change product specifications without notice.

PROJECTED LUMEN MAINTENANCE

AMBIENT TEMP.	0	25,000	50,000	*TM-21-11 60,000	100,000	PROJECTED L70 (HRS)
25°C/ 77°F	100%	95%	93%	92%	89%	>60,000
40°C/ 104°F	100%	94%	91%	90%	85%	>60,000

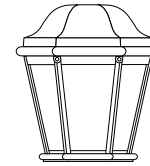
DIMENSIONS



ALN540PM

ALN540PM

HEIGHT: 35"/890mm
LENGTH: 18"/460mm
WIDTH: 18"/460mm
WEIGHT: 40 lbs.
EPA: 2.80



ALN540D

ALN540D

HEIGHT: 21"/520mm
LENGTH: 18"/460mm
WIDTH: 18"/460mm
WEIGHT: 35 lbs.
EPA: 2.59

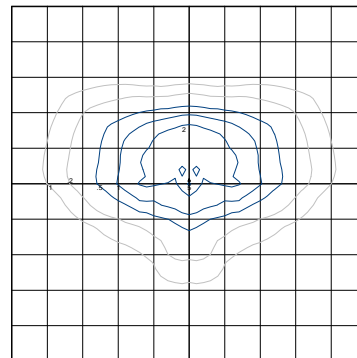
PERFORMANCE DATA (32 LEADS, 700 MA DRIVE CURRENT, 75 WATTS)

TYPE	LENS	5K					4K					3K				
		LUMENS	LPW	B	U	G	LU-MENS	LPW	B	U	G	LUMENS	LPW	B	U	G
Y2	CLEAR	5838	78	2	3	3	5489	73	2	3	3	4320	58	1	3	2
Y3		5793	77	2	3	2	5445	73	2	3	2	4287	57	1	2	2
Y4		5772	77	1	3	3	5427	72	1	3	3	4271	57	1	3	2
Y5		5319	71	3	3	3	5002	67	3	3	2	3935	52	2	3	2
Y2	LDL	5438	73	2	4	3	5112	68	2	4	3	4024	54	1	3	3
Y3		5406	72	2	4	3	5082	68	1	4	3	4001	53	1	3	3
Y4		5444	73	1	4	3	5118	68	1	4	3	4029	54	1	4	3
Y5		5037	67	2	4	3	4735	63	2	4	3	3728	50	2	3	2
Y2	SBL	5014	67	2	4	3	4713	63	2	4	3	3710	49	1	4	3
Y3		4986	66	1	4	3	4687	62	1	4	3	3689	49	1	4	2
Y4		5036	67	1	4	3	4734	63	1	4	3	3727	50	1	4	3
Y5		4633	62	2	4	3	4355	58	2	4	3	3428	46	1	3	2

ALN540-Y3-32LED-5K-700 WATTAGE: 74 LUMEN OUTPUT: 5793 EFFICACY: 78 Lm/W

B2 U3 G2

FORWARD LIGHT		LUMEN	
FL	30°	4.1%	236.6
FM	60°	34.1%	1973.7
FH	80°	28.5%	1651.9
FVH	90°	3.2%	182.6
BACK LIGHT			
BL	30°	3.5%	201.5
BM	60°	11.6%	671.0
BH	80°	10.6%	614.0
BVH	90°	2.5%	145.3
UPLIGHT			
UL	100°	1.1%	62.3
UH	180°	0.9%	54.1

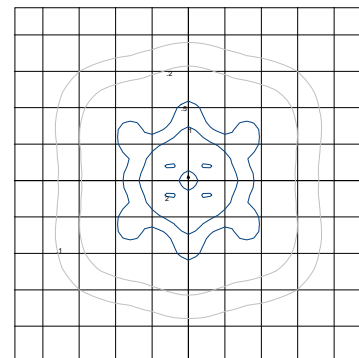


14' MOUNTING HEIGHT

ALN540-Y5-32LED-5K-700 WATTAGE: 73.8 LUMEN OUTPUT: 5319 EFFICACY: 72 Lm/W

B3 U3 G3

FORWARD LIGHT		LUMEN	
FL	30°	3.6%	192.0
FM	60°	16.6%	881.0
FH	80°	24.1%	1281.6
FVH	90°	4.6%	244.9
BACK LIGHT			
BL	30°	3.6%	192.0
BM	60°	16.6%	881.0
BH	80°	24.1%	1281.6
BVH	90°	4.6%	244.9
UPLIGHT			
UL	100°	1.6%	83.0
UH	180°	0.7%	37.1



14' MOUNTING HEIGHT

IES files can be found at www.aal.net



ARCHITECTURAL AREA LIGHTING
17760 Rowland Street | City of Industry | CA 91748
P 626.968.5666 | F 626.369.2695 | www.aal.net
Copyright © 2014 May 9, 2017 3:33 PM

CATALOG # _____

PROJECT _____

TYPE _____



This octagonal shaped luminaire consists of a luminaire base with an integral housing, an eight-sided lens frame, eight lens panels, an octagonal shaped hinged roof and a spiked finial.

- Stainless steel hardware
- 7 Different styles of bases coordinate with this luminaire
- 3" O.D. x 3" tall tenon required for mounting
- ≥ 70,000 hrs L70 25°C
- Performance Comparable to 70W-100W MH (3600-5600 delivered lumens)
- Input watts of 77 @ 700mA
- Driver life of 100,000hrs. at 25° C - all drive currents
- Optional surge protection to C62.41 C-Low (SPDL option)
- 5 year limited warranty

Max EPA: 2.56 sq feet
with SPIKE: 2.69 sq feet
Max Height: 43" (109.2cm)
with SPIKE: 43" (109.2cm)
Max Width: 16-1/8" (40.1cm)
with SPIKE: 20" (50.8cm)
Max Weight: 48 lbs (21.8 kg)

Sample Catalog number:

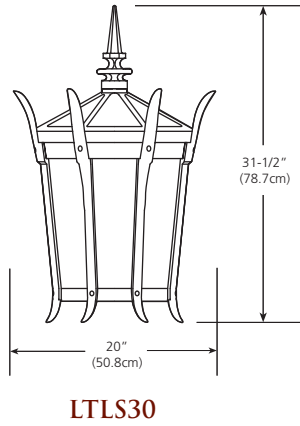
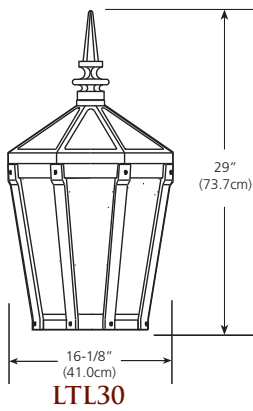
LTL30	E	32LED 525MA	3K	ACT	MVOLT	N5	SF	DBL
Fixture	Base	Source & Wattage	Color Temp	Lens Option	Voltage	Distrib.	Electrical Options	Finish

Ordering Guide:

Fixture	Base	Source & Wattage	Color Temp	Lens Option	Voltage	Distribution	Electrical Options	Finish
LTL30	A	32LED 525MA	3K	ACT	MVOLT	N5	SF	DBL
LTLS30	AU	32LED 700MA	4K		347	N3*	DF	DDB
	D	24LED 700MA	5K		480		PER	DNA
	E						PE1	DWH
	K						PE3	CS
	W						PE4	CM
	X						PE7	ANBK
							PEB1	ANDB
							PEB2	ANDG
								ANVG

*N3 distribution only available with 24 LED 700MA source and wattage selection

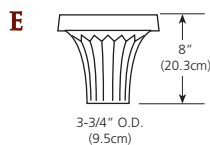
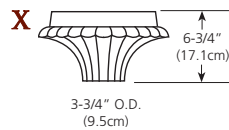
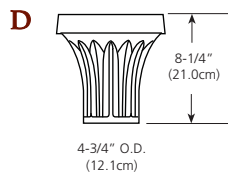
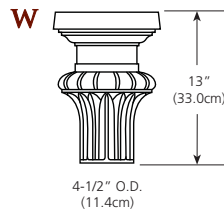
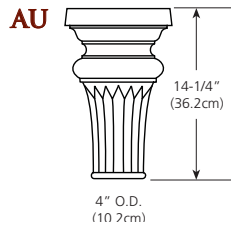
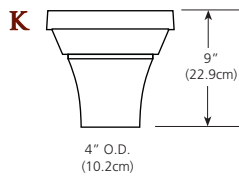
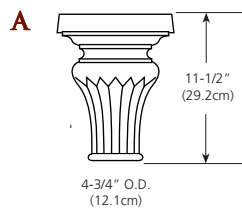
FIXTURE



SELECT YOUR CHOICE FROM

- LTL30** Luminaire, LT30
- LTLS30** Luminaire, Spikes

BASE



SELECT YOUR CHOICE FROM

Mount to 3" O.D. x 3" tall tenon: 3T3

- A** **K**
- AU** **W**
- D** **X**
- E**

Notes:

- Items in bold have shorter lead times.
- Consult factory for wattages available for LDB option.
- LDB option is not available with photocontrol options PEB1 and PEB2.

SOURCE & WATTAGE

SELECT YOUR OPTIONS FROM

- 32LED 525MA**
- 32LED 700MA**
- 24LED 700MA** (Available in N3 Distribution Only)

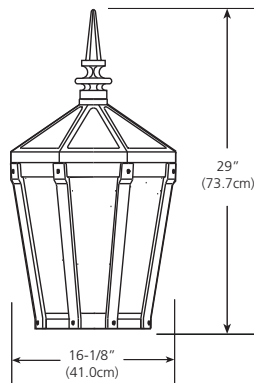
LTL30 LED & LTLS30 LED

COLOR TEMP

SELECT YOUR OPTIONS FROM

- 3K** 3000K
- 4K** 4000K
- 5K** 5000K

LENS OPTION



SELECT YOUR CHOICE FROM

- ACT** Acrylic, Clear Textured (Standard)

VOLTAGE

SELECT YOUR OPTIONS FROM

- MVOLT** MVOLT
- 347** 347V
- 480** 480V

DISTRIBUTION

SELECT YOUR OPTIONS FROM

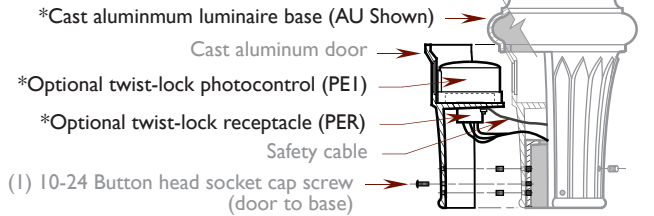
- N5** No Refractor, Type V
- N3*** No Refractor, Type III

Notes:

*Available in only 24 LED 700MA selection

LTL30 LED & LTL30 LED

ANTIQUE STREET LAMPS™



***TWIST & LOCK PHOTOELECTRIC CELL OPTIONS**
available with luminaire bases AU only.



SELECT YOUR OPTIONS FROM

- Fuse Not Included
- SF** Single Fuse
 - DF** Double Fuse
-
- PER** Twist-Lock Photocontrol Receptacle
 - PE1** NEMA Twist & Lock PE 120, 208, 240 volt
 - PE3** NEMA Twist & Lock PE 347 volt
 - PE4** NEMA Twist & Lock PE 480 volt
 - PE7** NEMA Twist & Lock PE 277 volt
 - PEB1** Cell Button 120 volt
 - PEB2** Cell Button 208, 240, 277 volt

Notes:








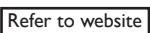
- Twist-lock photocontrol only available with AU base.
- PER is required when PE1, PE3, PE4 or PE7 is used.

FINISH

The luminaire has a powder coat finish utilizing a premium TGIC polyester powder. The finish is a three-stage process which consists of drying, powder application and curing. Before coating, the parts are treated with a five-stage pretreatment process, consisting of a heated alkaline cleaner, rinse, phosphate coating, rinse and sealant.

For a complete listing of colors, visit:
www.acuitybrandslighting.com/architecturalcolors

SELECT YOUR CHOICE FROM

- DBL** Black 
- DDB** Dark Bronze 
- DNA** Natural Aluminum 
- DWH** White 
- CS** Custom Select (RAL colors)
- CM** Custom Match
- ANBK** ASL Black 
- ANDB** ASL Dark Bronze 
- ANDG** ASL Dark Green 
- ANVG** ASL Verde Green 

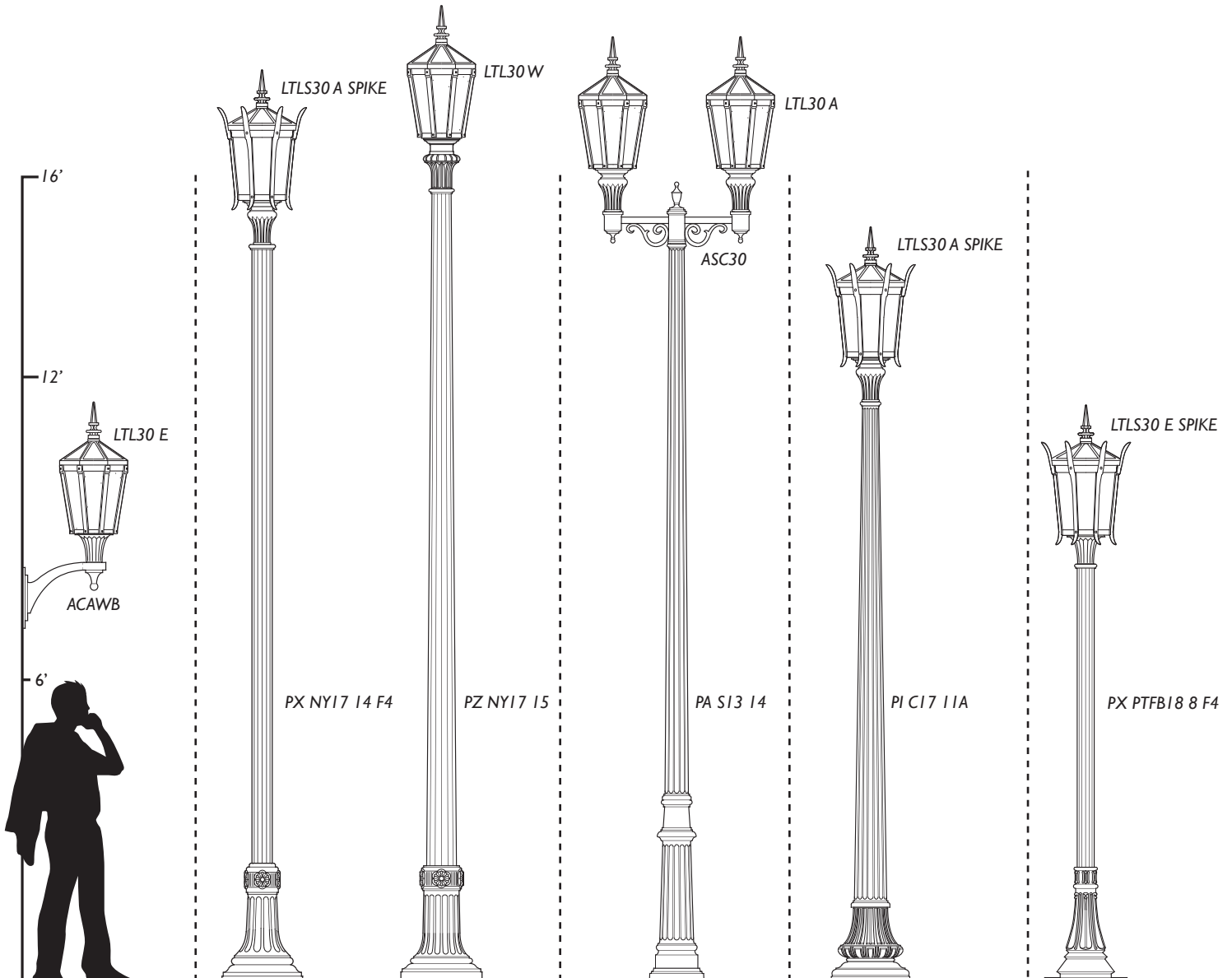
ACA SERIES
CROSSARMS &
WALL BRACKETS

NEW YORK SERIES
CAST ALUMINUM POST
IRON & STEEL POST

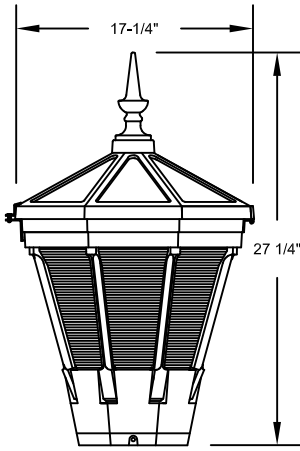
SUSSEX SERIES
CAST ALUMINUM POST

CAPITOL SERIES
IRON & STEEL POST

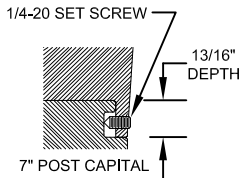
**PEACHTREE
SERIES**
CAST ALUMINUM POST



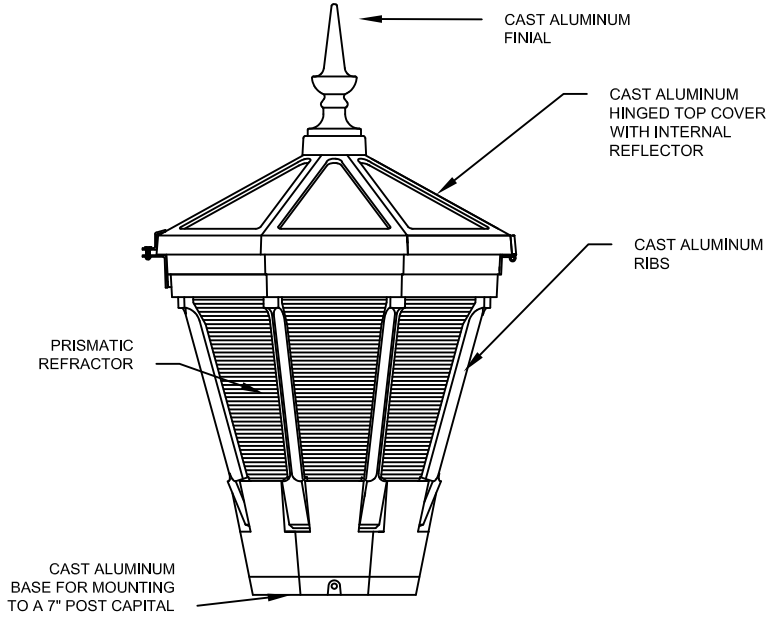
For detailed product specifications for Poles and Arm/Wall Mount see the Antique Street Lamps website.



SECTION OF BALLAST HOUSING AT MOUNTING POINT



Maximum weight - 34 lbs
Maximum effective projected area - 1.4 sq. ft.



Arlington LED[®] Postop Luminaire

DECORATIVE OUTDOOR

ORDERING INFORMATION:

ARE2

HOUSING STYLE
ARE2 = ARLINGTON LED POST TOP

COLOR TEMPERATURE
27K = 2700 K CCT
30K = 3000 K CCT
40K = 4000 K CCT
50K = 5000 K CCT

VOLTAGE
AS = AUTO-SENSING (120-277) 50/60 HZ
AH = AUTO-SENSING (347-480) 50/60 HZ

COLOR
BK = BLACK
BZ = BRONZE
GH = GRAPHITE
GN = GREEN
GR = GREY
PP = PRIME PAINT
WH = WHITE
CMC = CUSTOM MATCH COLOR
TDC = TIGER DRYLAC COLOR (RALxxx)
XX = STD FINISH, TBD

FINIAL
B = BALL
S = SPIKE
N = NONE

LED PERFORMANCE PACKAGE
(SEE PERFORMANCE DATA TABLE FOR DETAILS, PAGE 2)
P10 = LED PERFORMANCE PACKAGE
P20 = LED PERFORMANCE PACKAGE
P30 = LED PERFORMANCE PACKAGE
P40 = LED PERFORMANCE PACKAGE
P50 = LED PERFORMANCE PACKAGE

OPTICS
ACRYLIC REFRACTOR
AY3 = TYPE 3
AY5 = TYPE 5
GLASS REFRACTOR
GL3 = TYPE 3
POLYCARBONATE REFRACTOR
PY3 = TYPE 3
PY5 = TYPE 5

OPTIONS

CONTROL OPTIONS

FPDxx = FACTORY PROGRAMMED DRIVER
P3E = NEMA TWISTLOCK RECEPTACLE EXTERNALLY MOUNTED - 3 PIN
P7E = NEMA TWISTLOCK RECEPTACLE EXTERNALLY MOUNTED - 7 PIN
P34 = DTL TWISTLOCK PHOTOCONTROL 347V
P48 = DTL TWISTLOCK PHOTOCONTROL 480V
PCLL = DTL LONG LIFE TWISTLOCK PHOTOCONTROL FOR SOLID STATE "AS" & "AH"
PCS = DTL TWISTLOCK PHOTOCONTROL FOR SOLID STATE "AS"
PSC = SHORTING CAP
RME = ROAM NODE (120-277V) EXTERNALLY MOUNTED WITH 7 PIN
RME3 = ROAM NODE (347V) EXTERNALLY MOUNTED WITH 7 PIN
RME4 = ROAM NODE (480V) EXTERNALLY MOUNTED WITH 7 PIN

SURGE PROTECTION OPTION
20kV = 20kV/10kA SURGE PROTECTOR

PREWIRE LEAD OPTIONS

L1H = 1.5 FEET OF PREWIRED LEADS L20 = 20 FEET OF PREWIRED LEADS
L03 = 3 FEET OF PREWIRED LEADS L25 = 25 FEET OF PREWIRED LEADS
L10 = 10 FEET OF PREWIRED LEADS L30 = 30 FEET OF PREWIRED LEADS

ACCESSORIES

DECORATIVE ADAPTOR FIELD INSTALLED OPTIONS

GV1A73** = 3" TO 7" POST CAPITAL (** = SELECT COLOR)

HOUSE SIDE SHIELD FIELD INSTALLED OPTIONS

PHSS90 = HOUSE SIDE SHIELD SOLID 90 DEGREE
PHSS12 = HOUSE SIDE SHIELD SOLID 120 DEGREE
PHSS18 = HOUSE SIDE SHIELD SOLID 180 DEGREE

SURGE REPLACEMENT FIELD INSTALLED OPTIONS

SPDPLUGIN-AS = REPLACEMENT FOR 120-277V
SPDPLUGIN-AH = REPLACEMENT FOR 347-480V
SPDPLUGIN-AS-20KV = REPLACEMENT FOR 120-277V 20kV/10kA
SPDPLUGIN-AH-20KV = REPLACEMENT FOR 347-480V 20kV/10kA

FOR COMPATABLE OPTIONS, REFER TO THE
OPTION MATRIX ON PAGE 3 OF 4



THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE USED ON THE ORDER IF IT IS IDENTICAL TO THE DESIGN NOTED ABOVE. VARIATIONS IN COLOR, FINISH, ANCHOR BOLT, TEMPLATES, PRINT WILL BE SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE PROVIDED. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS WRITTEN NOTICE TO THE SUPPLIER. ANY REUSE OR REPRODUCTION IN ANY WAY DETRIMENTAL TO OUR INTERESTS, AND ONLY IN CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE.

ORDER #:
TYPE:
DRAWN: MRP
DATE: 02/01/2018
DWG #: LUM_ARE2

OPTIONS MATRIX

Parameters		SELECTED OPTION (start here)										
		FPDxx	P3E	P7E	P34	P48	PCLL	PCS	PSC	RME	RME3	RME4
LED Performance Package	P10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P20	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P30	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P40	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Voltage	AS	Y	Y	Y	N	N	Y	Y	Y	Y	N	N
	AH	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Finial	B	Y	N	N	Y	Y	Y	Y	Y	N	N	N
	S	Y	N	N	Y	Y	Y	Y	Y	N	N	N
	N	Y	M	M	Y	Y	Y	Y	Y	M	M	M
Compatible Options	FPDxx		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P3E	Y		N	M	M	M	M	M	N	N	N
	P7E	Y	N		M	M	M	M	M	I	I	I
	P34	Y	M	M		N	N	N	N	N	N	N
	P48	Y	M	M	N		N	N	N	N	N	N
	PCLL	Y	M	M	N	N		N	N	N	N	N
	PCS	Y	M	M	N	N	N		N	N	N	N
	PSC	Y	M	M	N	N	N	N		N	N	N
	RME	Y	N		N	N	N	N	N		N	N
	RME3	Y	N		N	N	N	N	N	N		N
RME4	Y	N		N	N	N	N	N	N	N		

OPTIONS MATRIX Legend

I = Included with selected option
M = Must have: one of these must be installed for the luminaire to operate
N = Combination not available
Y = Valid Option Combination

ROAM Option Details

RME: UL listed device without GPS capability, blue housing color, includes ROAM capable node only, ROAM service package sold separately via Acuity Controls and contact Acuity Controls for RME device with GPS capability or non-standard housing color
RME3: UL listed device without GPS capability, green housing color, includes ROAM capable node only, ROAM service package sold separately via Acuity Controls and contact Acuity Controls for RME device with GPS capability or non-standard housing color
RME4: UL listed device without GPS capability, yellow housing color, includes ROAM capable node only, ROAM service package sold separately via Acuity Controls and contact Acuity Controls for RME device with GPS capability or non-standard housing color

Arlington LED
Series Luminaire

DECORATIVE
OUTDOOR



Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Average Lumen Ambient Temperature (LAT) Multipliers			
°C	°F	Lumen Multiplier	LED Packages
0	32	1.04	P10, P20, P30, P40, P50
5	41	1.03	
10	50	1.02	
15	59	1.01	
20	68	1.01	
25	77	1.00	
30	86	0.99	
35	95	0.98	
40	104	0.98	

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Lumen Maintenance - LLD (same for all LED packages)							
Hours	0	25,000	36,000	50,000	60,000	75,000	100,000
Factor	1	0.93	0.91	0.87	0.85	0.82	0.77

The *italicized data* is extrapolated beyond the TM-21 standard.

$$E = (LM) \times (CU) \times (LAT) \times (LLD)$$

LM and CU are obtained from published photometry.


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ORDER #:
TYPE:
DRAWN: MRP
DATE: 02/01/2018
DWG #: LUM_AREA

Mark Appropriate Box for Finial Options

Finials

No Finial (N)

Ball (B) 

Spike (S) 

Arlington LED
Series Luminaire

DECORATIVE
OUTDOOR


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 LEADER IN LIGHTING SOLUTIONS
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Specifications

Mechanical Specifications

The luminaire housing shall:

- Be heavy grade A360 cast aluminum (aluminum with <1% copper)
- Be tool-less access with a spring-loaded latch
- Incorporate a hidden hinge door allowing the door to swing open and remain open
- Offer units with an E.E.I.-N.E.M.A. twist lock photocontrol receptacle, the housing must contain a tempered glass lens "window" to allow light to reach the cell
- Mount to a slipfitter that will accept a 3" high by 2-7/8" to 3-1/8" O.D. pole tenon

The decorative cover shall:

- Be heavy grade A360 cast aluminum (aluminum with <1% copper)
- Be attached to the top ring of the luminaire housing using a stainless-steel piano hinge and latched by an over-center, positive action, stainless steel latch which secures entry to the LED optical chamber

The finish shall:

- Utilize a polyester powder paint to ensure maximum durability
- Meet 10,000-hour salt spray test
- Offer Tiger Drylac finishes that are applied by a Tiger Drylac certified facility

Electrical Specifications

The driver shall be meeting the following requirements:

- Certified by UL or CSA
- A programmable electronic driver with 0-10V control leads
- Available in: 120-277V 50/60 Hz and 347-480V 60 Hz
- Manufactured by Osram, Philips, ULT or Thomas Research
- LEDs shall have a minimum of 70 CRI and available in 2700K, 3000K, 4000K and 5000K CCT and manufactured by:
- Samsung, Nichia or Cree
- The electrical system shall be designed to meet ANSI/IEEE C62.41.2 and shall:
- Offer a 10kV/5kA surge protection as standard
- Offer a 20kV/10kA surge protection option

Optical Specifications

The light engine housing shall be IP66. Two gaskets shall be part of the optical system, one on the top and bottom ridge. The optical system must consist of the following materials and include I.E.S. distributions:

- Prismatic borosilicate glass: Type III (borosilicate glass maximizes resistance to impact, thermal resistant, resisting browning and coefficient of utilization)
- Prismatic Acrylic: Type III & Type V
- Prismatic Polycarbonate: Type III & Type V

Control Options

The control options shall include, but not limited to, the following:

- Field adjust output to adjust lumen output at the luminaire - AO
- Wireless remote control for monitoring performance and/or maintenance of the system - ROAM
- Customize lumen output prior to manufacturing (FPDxx) and still enables control leads so other options can also be used
- Long life photocontrol, 20 years - PCLL with DTL
- 3 and 7 pin receptacles internally (P3, P7) or externally (P3E, P7E) mounted
- Part-night dimming enables luminaire to monitor and adjust 50% lumens based on season and geographical location, 8 day rolling average - PND

Certification and Standards

- Luminaire shall be UL or CSA listed per CSA luminaire standard CSA
- Suitable for operation in an ambient temperature up to 40°C / 104°F per UL or CSA certification
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
- LM-79 compliant
- The projected LED Lumen Maintenance shall be based only on IES LM-80-08, current, and not TM-21.

Warranty - 5 Years Limited

Complete warranty terms located at:

www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

ORDER #:

TYPE:

DRAWN: MRP

DATE: 02/01/2018

DWG #: LUM_ARE2

DDA MEMORANDUM

To: Cascade Township DDA Board

From: Sandra Korhorn, DDA/Economic Development Director *SKK*

Subject: Discuss DDA Streetlights - LED Conversion

Meeting Date: July 16, 2019

We have discussed changing out the Lumec streetlights in the past to a LED fixture, which would potentially save on maintenance and electric costs. Swapping out fixtures can be an expensive venture and it can take a number of years to get a return on the investment.

Having said that, I have asked Tony Kutzt, (FTCH lighting engineer) to look at some options for swapping out fixtures or doing a retrofit.

Tony has had the opportunity over the past couple weeks to reach out to manufacturers to get some pricing and evaluate new and retrofit fixture options. The new fixtures don't have much of a financial story. The payback is at least 20 years. The retrofit option has a much lower payback. There is one option is he very interested in that we have requested a sample installation on a retrofit kit. We are waiting to hear back from the company.

This is strictly a discussion item with no decisions needed at this time. When Tony has more information, we will bring this item back to the DDA board for further discussion and consideration.

DDA MEMORANDUM

To: Cascade Township DDA Board

From: Sandra Korhorn, DDA/Economic Development Director *SKK*

Subject: Discuss and Consider Budget for Oktoberfest Event at the Library

Meeting Date: July 16, 2019

The events committee has been meeting to discuss a variety of events in the District. One event is being planned is an Oktoberfest at the library property. The committee is looking for some type of budget for the event so planning can continue.

The event will be approximately 4 hours with bands, food, beer and activities for young and old. While the DDA/Township will be the event organizer, Thornapple Brewing will be a sponsor of the event securing the bands and organizing the beer tent.

In order to continue planning, we should discuss a budget for the event.

DDA MEMORANDUM

To: Cascade Township DDA Board
From: Sandra Korhorn, DDA/Economic Development Director *SKK*
Subject: Discuss Signage or Gateway Feature at the Museum Gardens
Meeting Date: July 16, 2019

I received an email request from a resident about a sign or gateway feature at the Museum Gardens Park. Below is the request from Sue:

This is from Sue a resident of Cascade Woods. Not certain if you are the one to receive this inquiry, but feel free to pass it along to the right person. I love our little park on the corner of Cascade Road and Thornapple River Drive.

I have lived here long enough to remember when it was an ugly gas station. Neighbors and I have discussed this many times. We wish it had a prominent sign that said something about "Welcome to Cascade, " or "Village of Cascade."

The park just needs a community focal point of some type. Everything else is very nice and certainly well maintained. Wondering if the township would look into this inquiry? Thanks for reading!

I did respond to Sue to let her know we received her email and that I would approach the DDA board about the request.