

DESCRIPTION

The Invue Arbor post top brings architectural style to area/site and pedestrian scale applications. Its dayform appearance brings a desired organic look into the urban environment. WaveStream™ LED Optics provide a uniform pixelation free image, managing glare while providing high levels of visibility.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Two-piece IP66 rated housing is cast from low copper content corrosion resistant aluminum, maintaining strength and precision to sustain long term dayform appearance. ANSI C136.31 testing compliance prevents damage from installation generated vibration. External hardware and casting seams are minimized to enhance appearance.

Optics

Specifically designed for pedestrian applications, WaveStream LED optical waveguide technology produces both symmetric NEMA type V and asymmetric NEMA II, III, IV distributions. The waveguide is manufactured from precision injection molded acrylic resulting in a pixelation free optical image for improved glare control and visual comfort. Luminaire efficacy's measure up to 100 lm/w for 4000K (+/- 275K) CCT at 70 CRI (min), optional 3000K CCT at 80 CRI is also available.

Electrical

LED driver(s) are directly mounted to upper housing thermal pad for optimal thermal performance. Standard 0-10V dimming drivers and Eaton's proprietary surge protection module are designed to withstand 10kV of transient line surge. Drivers operate at 120-

277V 50/60Hz with 347V/60Hz or 480V/60Hz operation optional. Suitable for ambient temperature applications from -30°C (-22°F) to 40°C (104°F). Limited high ambient options allow for 50°C operation.

Controls

The Arbor LED luminaire control options are designed to be simple and cost-effective ASHRAE and California Title 24 compliant solutions. The ANSI C136.41 compliant NEMA 7-PIN receptacle enables wireless dimming when used with compatible photocontrol. An integrated dimming and occupancy sensor is a standalone control option available in on/off (MS) and bi-level dimming (MS/DIM) operation. The optional LumaWatt Pro™ system is best described as a peer-to-peer wireless network of luminaire-integral sensors that operate in accordance with programmable profiles. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication.

Mounting

Fitter assembly mounts over 2-3/8" O.D. tenon and is secured via six concealed stainless steel set screws. Design of fitter provides seamless transition to 3" O.D. round pole top. Additional mounting accessories include a

single fixture arm mount, twin fixture arm mount and wall mount arm. Additional pole mount accessories mount to a 3" x 4" long tenon for 4" - 5" O.D. poles tops. For existing 2-3/8" tenons an adapter is shipped standard.

Finish

Eaton utilizes premium ultra-weatherable TGIC based polyester powder coatings that are specifically formulated to withstand extended outdoor exposure. The powders are formulated exclusively for Eaton to serve functionally as well as decorative. Good film appearance combined with excellent mechanical an exterior exposure qualities display greater than twice as much gloss retention. RAL and custom color matches available. Finish is compliant with ASTM B117 3000hr salt spray standard.

Warranty

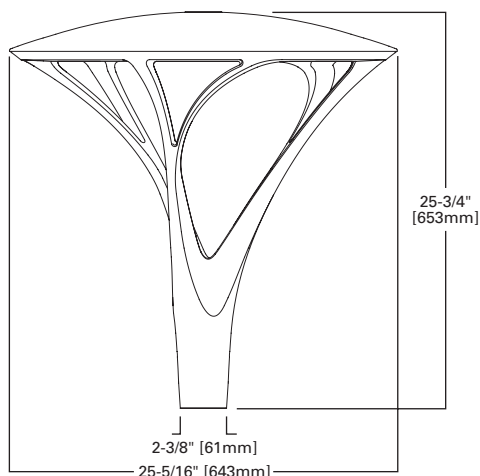
Five-year warranty.



ARB ARBOR POST TOP

DECORATIVE LUMINAIRE

DIMENSIONS



CERTIFICATION DATA

UL/cUL Listed
IP66 Housing
ANSI C136.31
1.5G Vibration Tested
RoHS
ISO 9001

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz, 347V/60Hz,
480V/60Hz
-30°C Minimum Temperature
40°C Ambient Temperature Rating

EPA

Effective Projected Area: (Sq. Ft.) 0.9

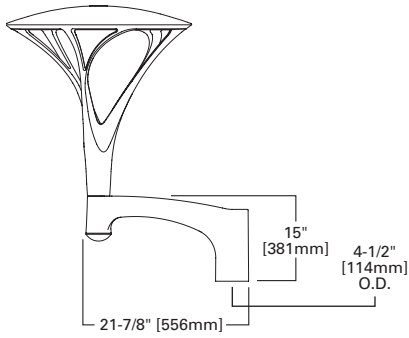
Approximate Net Weight:

37 lbs. [16.8 kgs.]

MOUNTING CONFIGURATIONS (WEIGHT AND EPAS INCLUDES FIXTURE)

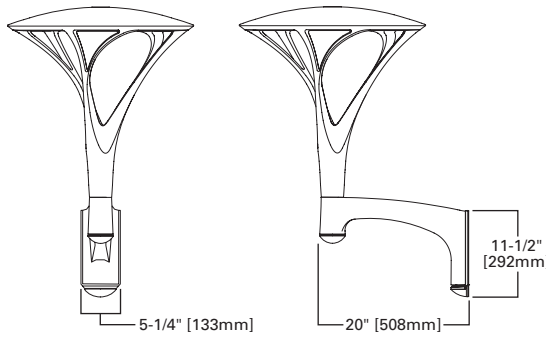
Single Arm Mount

Weight: 56 lbs. [25.45 kgs.]
EPA: 1.7 sq/ft

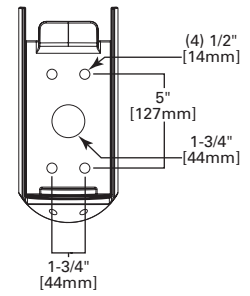


Wall Mount Arm

Weight: 57 lbs. [25.91 kgs.]
EPA: 1.8 sq/ft

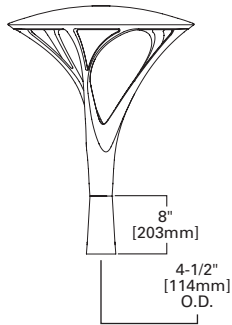


Wall Mount Arm Drill Pattern



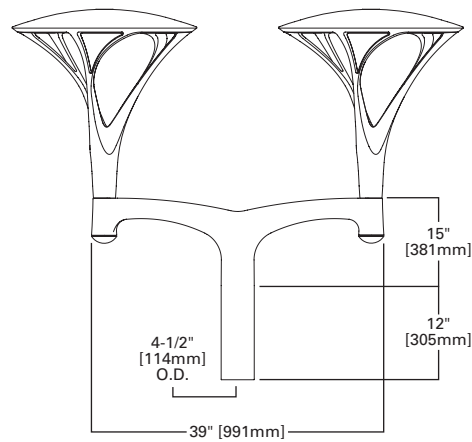
Post Top Adapter

Weight: 41 lbs. [18.63 kgs.]
EPA: 1.2 sq/ft

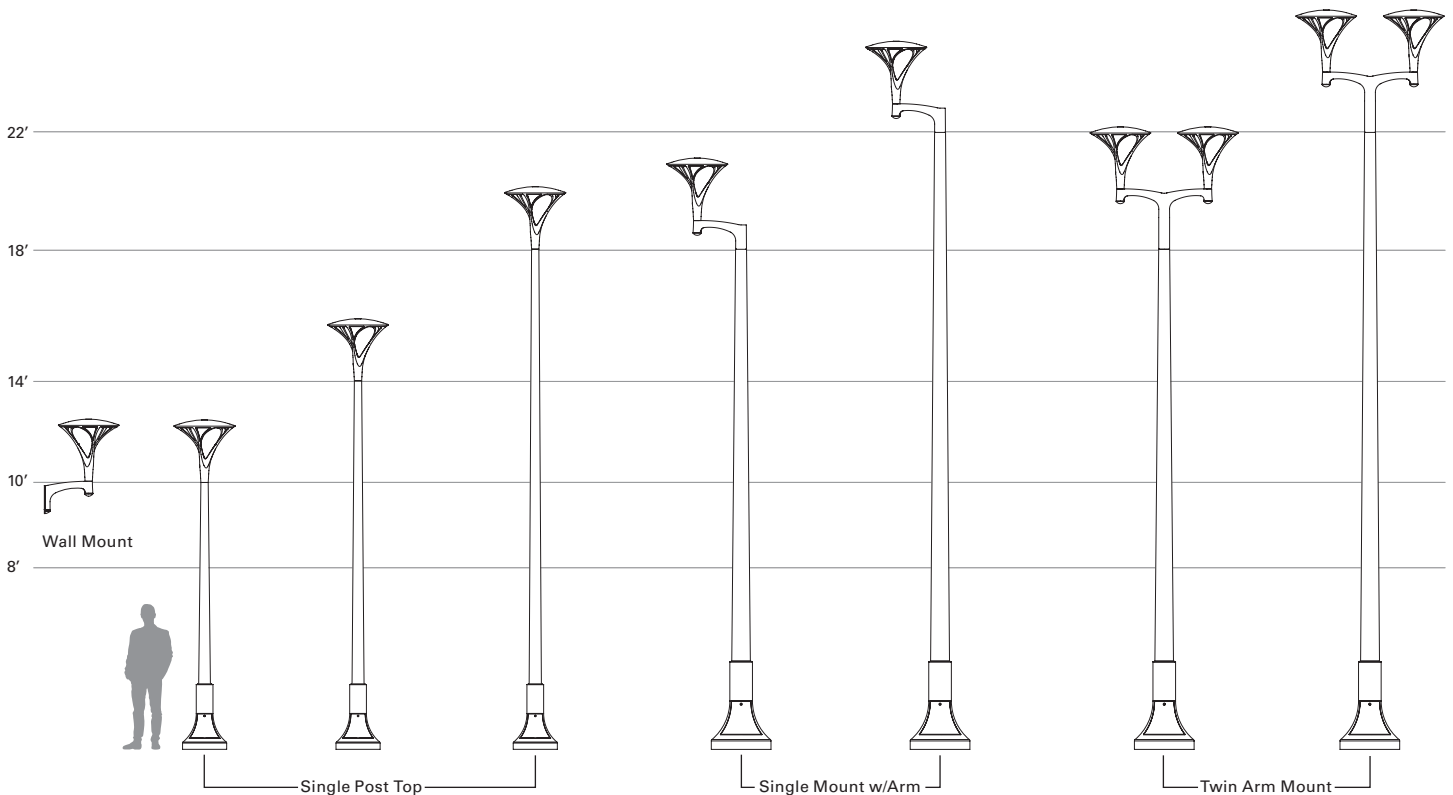


Twin Arm Mount - 1.5G

Weight: 114 lbs. [51.81 kgs.]
EPA: 3.45 sq/ft



POLE CONFIGURATIONS (ARP DECORATIVE POLE SHOWN)



POWER AND LUMENS

Lumen Package	B1	B2	B3	B4	
Drive Current					
Power Wattage (Watts)	24W	48W	96W	99W	
Input Current (mA) @ 120V	200	400	800	830	
Input Current (mA) @ 208V	120	240	470	480	
Input Current (mA) @ 240V	100	200	400	420	
Input Current (mA) @ 277V	90	180	350	360	
Power Wattage (Watts)	26W	53W	107W	108W	
Input Current (mA) @ 347V	79	161	325	328	
Input Current (mA) @ 480V	58	117	235	237	
Optics					
Type II	Lumens	2,045	3,994	7,362	--
	BUG Rating	B1-U1-G1	B1-U2-G2	B3-U2-G3	--
Type III	Lumens	2,324	4,534	8,451	-
	BUG Rating	B1-U1-G1	B1-U2-G2	B2-U2-G3	--
Type IV	Lumens	2,408	4,691	8,740	--
	BUG Rating	B1-U1-G1	B1-U2-G2	B2-U2-G3	-
Type V	Lumens	2,311	4,529	8,511	9,464
	BUG Rating	B2-U1-G1	B3-U2-G2	B3-U2-G3	B3-U2-G3

COLOR TEMPERATURE

Color Temperature (CCT)	CRI (Nominal)	Multiplier (Hours)
4000	70	1.00
3000	80	0.91

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Calculated L70 (Hours)
25°C	>91%	>230,000
40°C	>88%	>172,000
50°C	>86%	>142,000

NOTE: Maintenance data applies to the highest drive current and represents the worst case at the highest wattage.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

ORDERING INFORMATION

Sample Number: ARB-B2-LED-D1-T2-GM

Product Family ^{1,2}	Lumens ³	Lamp Type ⁵	Voltage	Distribution	Color
ARB=Arbor Post Top	B1=Nominal 2,300 Lumens B2=Nominal 4,500 Lumens B3=Nominal 8,500 Lumens B4=Nominal 9,500 Lumens ⁴	LED=Solid State Light Emitting Diodes	D1=Dimming Driver (120-277V) 347=347V ⁶ 480=480V ^{6,7}	T2=Type II T3=Type III T4=Type IV T5=Type V	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White CC=Custom Color ⁸
Options (Add as Suffix)			Accessories (Order Separately) ¹⁹		
7030=70 CRI / 3000K CCT ⁹ 8030=80 CRI / 3000K CCT ⁹ PC=Button Type Photocontrol ¹⁰ PER=Standard 3-PIN Photocontrol Receptacle ¹⁰ PER7=NEMA 7-PIN Twistlock Photocontrol Receptacle ^{10,11} HA=50°C High Ambient ¹² MS-LXX=Photo/Motion Sensor for On/Off Operation ^{13,14} MS/DIM-LXX=Programmable Photo/Motion Sensor ^{13,14,15} LWR-LW=LumaWatt Pro Wireless Sensor, Wide Lens 8' - 16' Mounting Height ¹⁶ LWR-LN=LumaWatt Pro Wireless Sensor, Wide Lens 16' - 40' Mounting Height ¹⁶ 5LTD=Fifth Light Dali Driver ¹⁷ DIM=0-10V External Dimming Leads ¹⁸ VS=Tempered Glass Vandal Shield			ARSA-XX=Single Pole Mount Arm ARWM-XX=Wall Mount Arm ARTA15-XX=Twin Mount Bracket - 1.5G ²⁰ ARPA4-XX=Pole Adapter 4" FSIR-100=Wireless Configuration Tool for Occupancy Sensor ¹⁵		

- NOTES:**
- Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional information.
 - Fixture slipfits over standard 2-3/8" or 3" O.D. tenon.
 - Lumens are nominal. See lumen table for more information.
 - B4 only available with Type V distribution.
 - Standard 4000K CCT, nominal 70 CRI.
 - Requires the use of a step down transformer.
 - Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
 - Cutsom and RAL color matching available upon request. Consult your lighting representative at Eaton for more information.
 - Extended lead times apply. Use dedicated IES files when performing layouts. These files are published on the Arbor luminaire product page on the website.
 - Not available with MS, MSDIM or DIMRF options.
 - Compatible with standard 3-PIN photocontrols and 5-PIN or 7-PIN ANSI controls.
 - Not available with Type II, III and IV B3 optics.
 - Not available with HA option.
 - Replace XX with mounting height in feet for proper lens selection, L8, L20 and L40 are available options.
 - This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
 - LumaWatt Pro wireless sensors are factory installed and require network components LWP-EM-1, LWP-GW-1, and LWP-Po in appropriate quantities. See www.eaton.com/lighting for LumaWatt application information.
 - Only available with B1 and B2 lumen packages.
 - Low voltage control leads brought out 18" outside fixture. Not available with control options.
 - Replace XX with color designation.
 - Fits on 3" O.D. x 4" long tenon only.

CONTROL OPTIONS

0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (PC, PER and PER7)

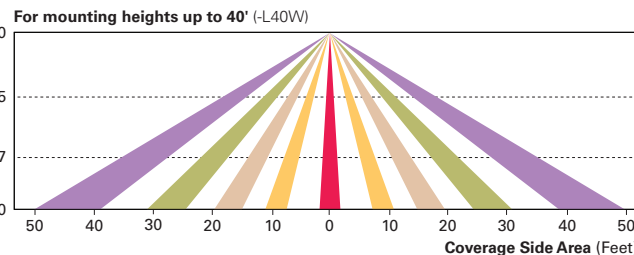
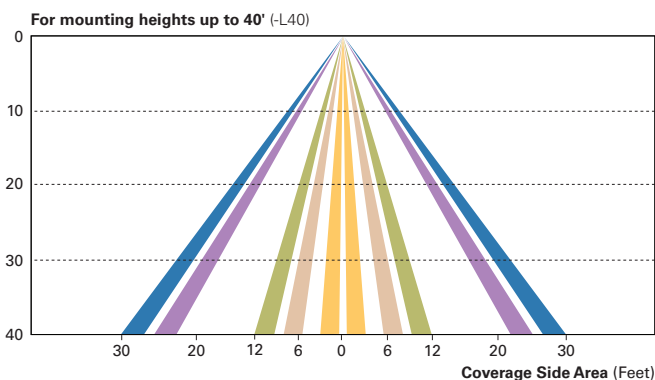
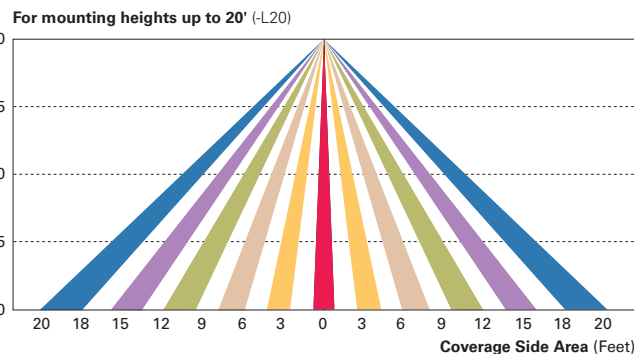
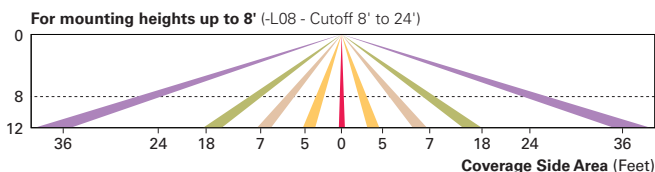
Optional button-type photocontrol (PC) and photocontrol receptacles (PER and PER7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)

These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for “dusk-to-dawn” control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters.

A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8'-40'.



LumaWatt Pro WirelessControl and Monitoring System (LWR-LW and LWR-LN)

The LumaWatt Pro system is a peer-to-peer wireless network of luminaire-integral sensors for any sized project. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. The end-user can securely create and manage sensor profiles with browser-based management software. The software will automatically broadcast to the sensors via wireless gateways for zone-based and individual luminaire control. The LumaWatt Pro software provides smart building solutions by utilizing the sensor to provide easy-to-use dashboard and analytic capabilities such as improved energy savings, traffic flow analysis, building management software integration and more.

For additional details, refer to the LumaWatt Pro product guides.

