



Hadco's Hagerstown LED post top gives you the ability to create a unique style through our modular post top concepts to blend into any residential and historic urban settings. With the latest LED technology you can seamlessly replace traditional HID technology to maximize energy savings and significantly reduce total cost of ownership. The Hagerstown luminaire provides excellent uniformity, traditional customizable look, with the benefits of modern technology. These post tops are now available with comfort optics, providing a low glare solution for pedestrian applications.

Project: _____
 Location: _____
 Cat. No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

Ordering guide

Example: TX03C 196 G2 B C HQ A 1 A 3 N 730 A 6 N SP1

| Series | LEDs | Gen. | Pods | Roof | Cage/Band | Finials | Fasteners | Finish | Optics |
|---|---|---|---|--|--|---|--|--|--|
| TX03C | | G2 | | | | | | | |
| TX03C Hagerstown LED post top | 196 196 LEDs | G2 Gen 2 | B Round fitter w/ scalloped petals H Round contemporary fitter | C Tall Spun D Short Spun | HQ Smooth band HP Ribbed band | A A finial B B finial C C finial D D finial E E finial F F finial G G finial H H finial N No finial | 1 Hex head bolts 2 Allen head bolts | A Black B White G Verde H Bronze J Green | 1 Type 1 2 Type 2 3 Type 3 4 Type 4 5 Type 5 |
| Photo Control Receptacle | Future-Proof Control Receptacle | Color Temp | Voltages | Currents | Integral Controls | Surge protection | | | |
| Button eye photo controls E 120 VAC H 208/240/277 VAC K 347 VAC R Twist-lock receptacle N No photo control | R7 ³ Future Proof Photo Control 7-pin Receptacle N None | 830 ⁴ 3000K (80CRI) 840 4000K (80CRI) | A 120-277 VAC B 347-480 VAC | 4 450mA 6 650 mA 11 1150mA 16 1675mA 21 2100mA | DL ^{1,2} Compatible with DALI SRD ¹ Sensor ready driver, standard configuration SRD1 ¹ Sensor ready driver, alternate configuration N None | SP1 10kV/10kA SP2 (standard) 20kV/20kA (optional) | | | |

1. Not available with B (347-480) voltage
 2. DL not available with 4 (450mA) and 6 (650mA) drive currents
 3. R7 is located on top of the roof, N No Finial is required
 4. Only 3000K CCT and warmer/below are IDA International DarkSky Approved



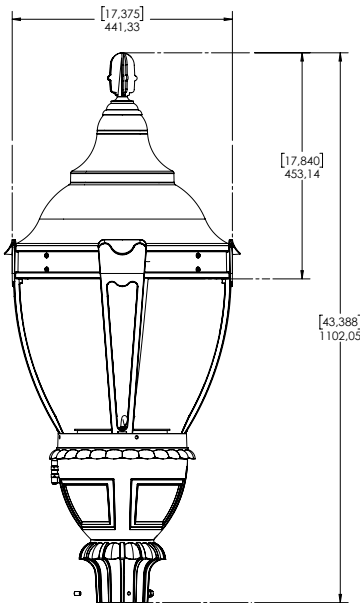
**DARKSKY
APPROVED**
 Reduces light pollution
 Certified by DarkSky.org



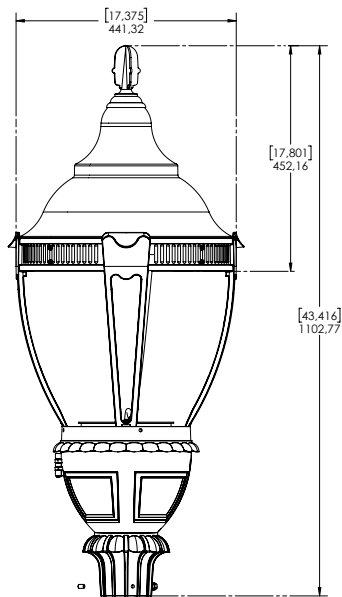
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Post top

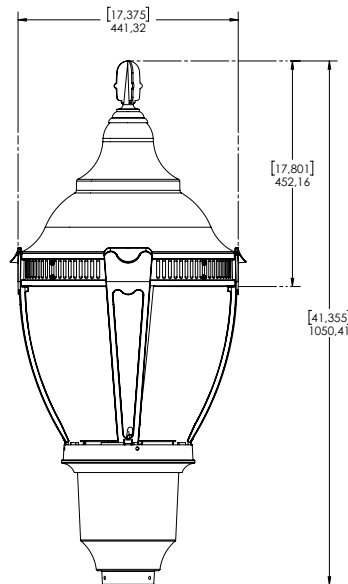
Dimensions



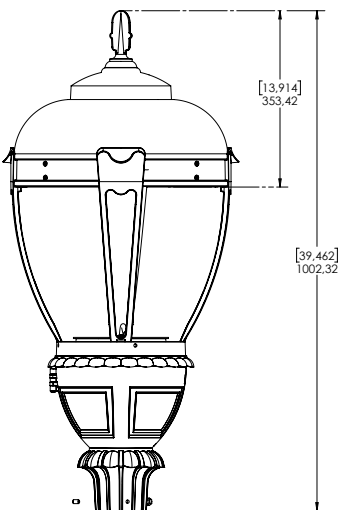
Pod: B
Roof: C
Cage: HQ
Weight: 27 lbs
EPA: 1.2 sq. ft.



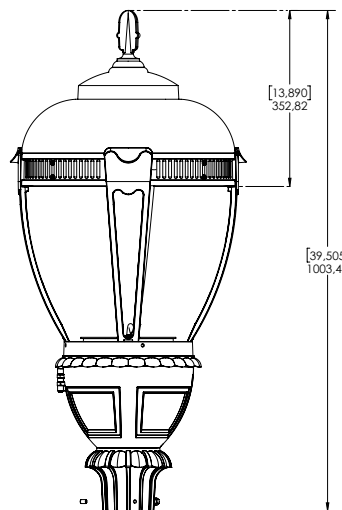
Pod: B
Roof: C
Cage: HP
Weight: 27 lbs
EPA: 1.2 sq. ft.



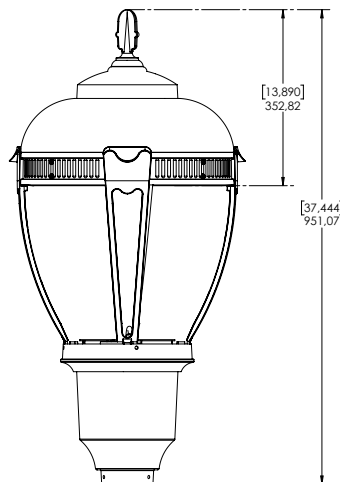
Pod: H
Roof: C
Cage: HP
Weight: 26 lbs
EPA: 1.2 sq. ft.



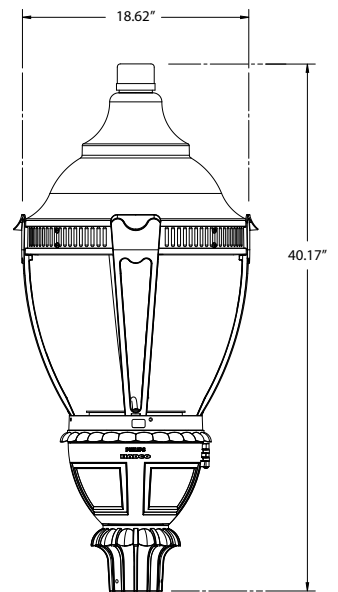
Pod: B
Roof: D
Cage: HQ
Weight: 27 lbs
EPA: 1.2 sq. ft.



Pod: B
Roof: D
Cage: HP
Weight: 27 lbs
EPA: 1.2 sq. ft.



Pod: H
Roof: D
Cage: HP
Weight: 26 lbs
EPA: 1.2 sq. ft.



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LED Performance

| Predicted lumen depreciation data | | | | |
|-----------------------------------|---------------|----------------------|---------------|------------------------------------|
| Ambient Temperature (°C) | Driver mA | Calculated L70 hours | L70 per TM-21 | Lumen Maintenance % @ 60,000 hours |
| 25 | up to 2100 mA | >100,000 | >60,000 | 86.5% |

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours.

LED Wattage and Lumen Values

| LED Module: 3000K | | | | Type 1 | | | Type 2 | | | Type 3 | | | Type 4 | | | Type 5 | | |
|-----------------------|---------|------------------|---------------------|-------------------------------|------------|----------------|-------------------------------|------------|----------------|-------------------------------|------------|----------------|-------------------------------|------------|----------------|-------------------------------|------------|----------------|
| Ordering Code | LED qty | LED Current (mA) | Avg. System Wattage | Delivered Lumens ² | BUG Rating | Efficacy (LPW) | Delivered Lumens ² | BUG Rating | Efficacy (LPW) | Delivered Lumens ² | BUG Rating | Efficacy (LPW) | Delivered Lumens ² | BUG Rating | Efficacy (LPW) | Delivered Lumens ² | BUG Rating | Efficacy (LPW) |
| TX03C-196-G2-x-830-4 | 196 | 450 | 21 | 1800 | B1-U0-G1 | 86 | 1821 | B1-U0-G1 | 87 | 1976 | B1-U0-G1 | 94 | 1999 | B1-U0-G1 | 95 | 2134 | B1-U0-G1 | 102 |
| TX03C-196-G2-x-830-6 | 196 | 650 | 30 | 2545 | B1-U0-G1 | 85 | 2575 | B1-U0-G1 | 86 | 2794 | B1-U0-G1 | 93 | 2827 | B1-U0-G1 | 94 | 3018 | B2-U0-G1 | 101 |
| TX03C-196-G2-x-830-11 | 196 | 1150 | 52 | 4448 | B2-U0-G2 | 86 | 4500 | B2-U0-G2 | 87 | 4883 | B2-U0-G2 | 94 | 4940 | B2-U0-G2 | 95 | 5273 | B3-U0-G2 | 101 |
| TX03C-196-G2-x-830-16 | 196 | 1675 | 75 | 6159 | B3-U0-G3 | 82 | 6231 | B3-U0-G3 | 83 | 6761 | B2-U0-G2 | 90 | 6840 | B2-U0-G2 | 91 | 7302 | B3-U0-G2 | 97 |
| TX03C-196-G2-x-830-21 | 196 | 2100 | 94 | 7514 | B3-U0-G3 | 80 | 7601 | B3-U0-G3 | 81 | 8248 | B3-U0-G3 | 88 | 8344 | B2-U0-G2 | 89 | 8908 | B3-U0-G2 | 95 |

| LED Module: 4000K | | | | Type 1 | | | Type 2 | | | Type 3 | | | Type 4 | | | Type 5 | | |
|-----------------------|---------|------------------|---------------------|-------------------------------|------------|----------------|-------------------------------|------------|----------------|-------------------------------|------------|----------------|-------------------------------|------------|----------------|-------------------------------|------------|----------------|
| Ordering Code | LED qty | LED Current (mA) | Avg. System Wattage | Delivered Lumens ² | BUG Rating | Efficacy (LPW) | Delivered Lumens ² | BUG Rating | Efficacy (LPW) | Delivered Lumens ² | BUG Rating | Efficacy (LPW) | Delivered Lumens ² | BUG Rating | Efficacy (LPW) | Delivered Lumens ² | BUG Rating | Efficacy (LPW) |
| TX03C-196-G2-x-840-4 | 196 | 450 | 21 | 1872 | B1-U0-G1 | 89 | 1894 | B1-U0-G1 | 90 | 2055 | B1-U0-G1 | 98 | 2079 | B1-U0-G1 | 99 | 2219 | B2-U0-G1 | 106 |
| TX03C-196-G2-x-840-6 | 196 | 650 | 30 | 2647 | B2-U0-G2 | 88 | 2678 | B1-U0-G1 | 89 | 2906 | B1-U0-G1 | 97 | 2940 | B1-U0-G1 | 98 | 3138 | B2-U0-G1 | 105 |
| TX03C-196-G2-x-840-11 | 196 | 1150 | 52 | 4626 | B2-U0-G2 | 89 | 4680 | B2-U0-G2 | 90 | 5078 | B2-U0-G2 | 98 | 5137 | B2-U0-G2 | 99 | 5484 | B3-U0-G2 | 105 |
| TX03C-196-G2-x-840-16 | 196 | 1675 | 75 | 6405 | B3-U0-G3 | 85 | 6480 | B3-U0-G3 | 86 | 7031 | B2-U0-G2 | 94 | 7113 | B2-U0-G2 | 95 | 7594 | B3-U0-G2 | 101 |
| TX03C-196-G2-x-840-21 | 196 | 2100 | 94 | 7814 | B3-U0-G3 | 83 | 7905 | B3-U0-G3 | 84 | 8578 | B3-U0-G3 | 91 | 8678 | B3-U0-G3 | 92 | 9264 | B3-U0-G2 | 99 |

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

Note: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

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Post top

Housing Specifications

Roof: Roof is 0.090" thick spun aluminum



Cage: Cage is constructed of die-cast 360 aluminum alloy. Cage has 4 legs each with decorative band options. Solid rectangular band around top of cage. Height of cage is 17" and width of cage is 15". Finish is polyester thermoset powdercoat.

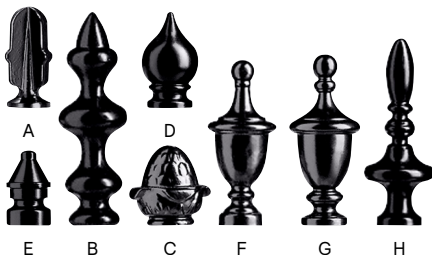
Pods: Wiring block to accept three #8 solid or stranded wires heavy cast aluminum post fitter utilizes three 5/16-18 black cadmium stainless steel set screws (Hex head or Allen head as specified) for mounting to 3" O.D. post tenon.

Optional Decorative Pods:

Round fitter with scalloped petals (B) is constructed of die-cast 360 aluminum alloy with side-hinged door providing 180° entry into the fitter assembly for easy access to the electrical components. Optional internal twist-lock photo eye receptacle or optional button eye photocell. Easy access to photo eye through the door on the pod (12 1/4"H x 11 1/2"W).



Round contemporary fitter (H) is constructed of 356 HM High-Strength, Low-Copper cast aluminum. Optional internal twist-lock photo eye receptacle or optional internal button eye photocell. Easy access to photocell through tool-less door on pod (10"H x 10"W).



Finials: All finials are cast aluminum mounted with 1/4-20 stainless steel threaded studs. Standard finial finish will match fixture finish as specified. Finish is thermoset powdercoat.

Fasteners: Used to secure post fitter to post tenon and globe to globe holder. Hex Head (1) and Allen Head (2) bolts feature Black cadmium stainless steel.

Light Engine

Light guide technology provides low-glare, uniform illumination. Composed of 196 LEDs strategically positioned on the edge of the optical plate. Light engine luminous opening size optimized to best achieve a balance between lumen output and optical performance with the need to provide visual comfort. Light engine frame ensures contact with housing to provide heat conduction and sealing against the elements. Light engine is RoHS compliant. Maximum ambient operating temperature up to 40°C(104°F). Standard color temperatures: 3000K +/- 130K, 4000K +/- 130K, Minimum CRI of 80. Also available in 2700K, 3500K, 5000K and Amber (>590nm) with extended lead times. Contact factory for details.

Optical System

The advanced LED comfort optical system provides Types 1, 2, 3, 4 and 5. Composed of high performance UV-stabilized optical grade lens with molded micro-optics to achieve desired distribution optimized to get a exceptional lighting uniformity. Performance tested per LM- 79 and TM-15 (IESNA) certifying its photometric performance. Street side indicated luminaire designed with 0% uplight (UO per IESNA TM-15).

Driver

High power factor of 95%. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 and 347 to 480 VAC rated for both application line to line or line to neutral, Class 2, THD of 20% max. Maximum ambient operating temperature from 40°F (40°C) to 130°F (50°C). Certified in compliance to UL1310 cULus requirement. Dry and damp location. Assembled on a unitized removable tray with Tyco quick disconnect plug resisting to 221°F (105°C). Dimmable driver 0-10V. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min) with DALI, driver is class 1. Due to the inrush current that occurs with electronic drivers, recommend using a time-delay or slow blow fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

Driver Options

DL: Pre-set driver compatible with the DALI logarithmic control system.

SRD: Sensor Ready Driver including SR communication (used for dimming and other functionalities), 24V auxiliary supply and a logical signal input (LSI) connected to the top NEMA twist lock receptacle.

SRD1: Sensor Ready Driver including SR communication (used for dimming and other functionalities) but with 24V auxiliary supply and a logical signal input (LSI) not connected to the top NEMA twist lock.

Surge Protection

Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA. Optional SP2: 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

Finish

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils / 24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

Luminaire Useful Life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, using LM-80 data from LED manufacturers and engineering prediction methods, the luminaire useful life is expected to reach 100,000+ hours with >L70 lumen maintenance @ 25°C. Luminaire useful life accounts for LED lumen maintenance and all of these additional factors including: LED color shift, LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion. Lifetime statements do not include the use of controls, including networked controllers.

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Specifications (continued)

LED products manufacturing standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340 5 1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Quality Control

The manufacturer must provide a written confirmation of its ISO 9001 2014 Quality Standards Certification.

Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed inside the luminaire, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the app and register your product right away.

For more details visit: [signify.com/global/service-tag](https://www.signify.com/global/service-tag)

Certifications and Compliance

cETLus Listed for Canada and U.S. to the UL1598 and UL8750 standards, suitable for Wet Locations. The quality systems of the facility where manufactured have been registered by UL to the ISO 9001 series standards. LM80 & LM79 tested. CCTs 3000K and warmer are Dark Sky Approved.

IP Rating

IP66 rated LED light engine.

Warranty

5-year limited warranty. Options available for extended warranties – contact factory.

See [signify.com/warranties](https://www.signify.com/warranties) for details and restrictions.

Buy American Act of 1933 (BAA)

This product is manufactured in one of our US factories and, as of the date of this document, this product was considered a commercially available off-the-shelf (COTS) item meeting the requirements of the BAA.

This BAA designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies. Prior to ordering, please visit www.signify.com/baa to view a current list of BAA-compliant products to confirm this product's current compliance.

Vibration Resistance

Meets the ANSI C136.31 2001 American National Standard for Roadway Luminaire Vibration specifications for normal Applications.