



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	Photo Control Receptacle	Future-Proof Control Receptacle
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	Button eye photo controls E 120 VAC H 208/240/277 VAC K 347 VAC R Twist-lock receptacle N No photo control	R7³ Future Proof Photo Control 7-pin Receptacle N None

Ordering guide (continued)

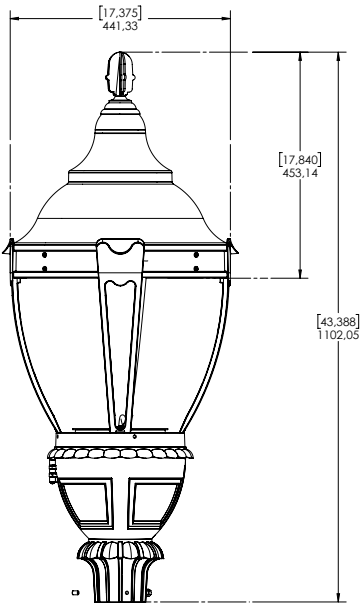
Color Temp	Voltages	Currents	Integral Controls	Surge protection
830 3000K (80CRI)	A 120-277 VAC	4 450mA 6 650 mA 11 1150mA	DL^{1,2} Compatible with DALI	SP1 10kV/10kA (standard)
840 4000K (80CRI)	B 347-480 VAC	16 1675mA 21 2100mA	SRD¹ Sensor ready driver, standard configuration SRD1¹ Sensor ready driver, alternate configuration N None	SP2 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

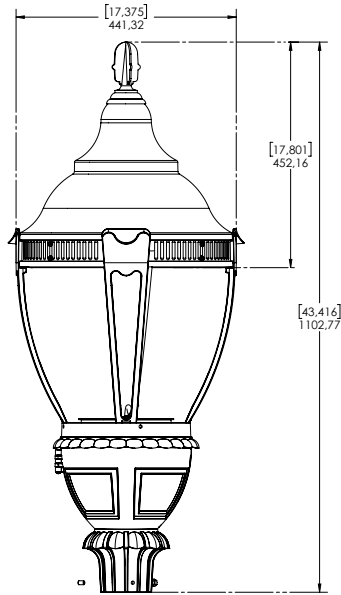
TX03-C Hagerstown

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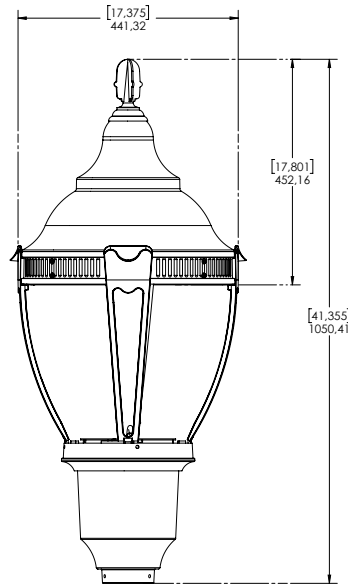
Dimensions



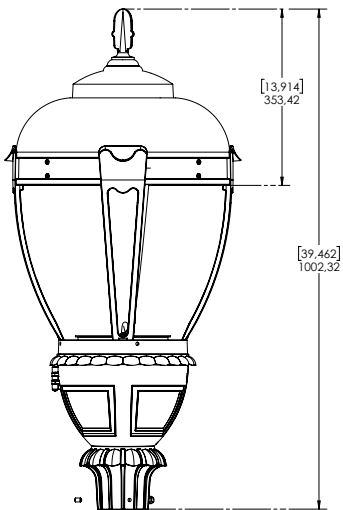
Pod: B
Roof: C
Cage: HQ
Weight: 27 lbs
EPA: 1.2 sq. ft.



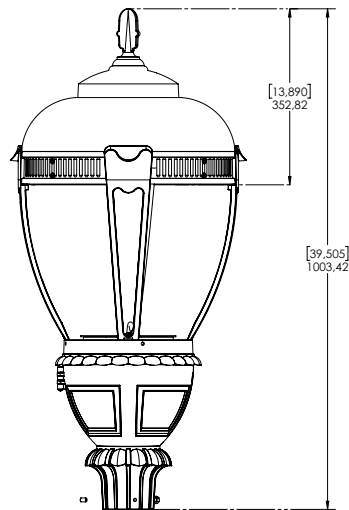
Pod: B
Roof: C
Cage: HP
Weight: 27 lbs
EPA: 1.2 sq. ft.



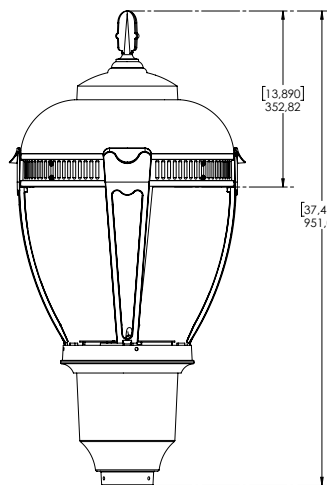
Pod: H
Roof: C
Cage: HP
Weight: 26 lbs
EPA: 1.2 sq. ft.



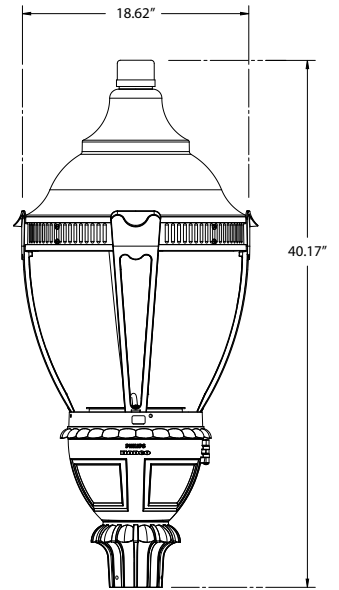
Pod: B
Roof: D
Cage: HQ
Weight: 27 lbs
EPA: 1.2 sq. ft.



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 ¹				
Ambient Temperature (°C)	Driver mA	Calculated L70 hours ^{1,2}	L70 per TM-21 ^{2,3}	Lumen Maintenance % @ 60,000 hours
25	up to 2100 mA	>100,000	>60,000	86.5%

1. 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.

2. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output.

3. 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

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout.

Note: Some data may be scaled based on tests of similar but not identical luminaires.

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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.

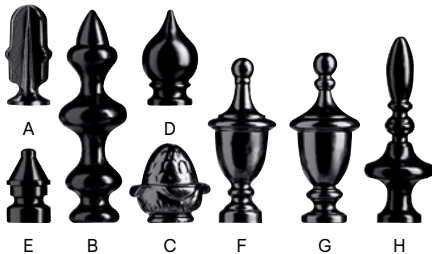
Pods: Wiring block to accept three #8 solid or stranded wires heavy cast aluminum post fitter utilizes three 5/16-18 black cadmium stainless steel set screws (Hex head or Allen head as specified) for mounting to 3" O.D. post tenon.

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 (U0 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.

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.

SRDI: 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. Option for SP2 20kV/20kA.

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 additional factors, including LED life, driver life, PCB substrate, solder joints on/off cycles and burning hours for nominal applications.

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.

Certifications and Compliance

cETL listed to Canadian safety standards for wet locations. Manufactured to ISO 9001:2014 Standards. UL8750 and UL1598 compliant. ETL listed to U.S. safety standards for wet locations. cETL listed to Canadian safety standards for wet locations. LM80 & LM79 tested.

IP Rating: The LED optics chamber is IP66 rated. The LED driver is IP66 rated.

Warranty: 5 year extended warranty.

Vibration Resistance

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



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Housing Specifications (continued)

