



Hadco Westbrooke pendant luminaires offer a simple and modern look but still traditional, providing style and performance to work in several urban applications including residential streets, city streets, campuses, parking lots and retail centers. These pendants 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: CXF14C-140-G1-A-A-2-730-A-4-DL-SP1-N

Model	LED's	Generation	Mounting	Finish	Distribution	Color Temp.	Voltage	Drive current
<input type="text"/>	<input type="text" value="140"/>	<input type="text" value="G1"/>						
CXF14C CXF15C Westbrooke	140 140 LEDs	G1	A Arm	A Black B White G Verde Green H Bronze I Silver Gray J Dark Green	1 Type 1 2 Type 2 3 Type 3 4 Type 4 5 Type 5	730 3000K (70 CRI) 740 4000K (70 CRI)	A 120-277 VAC B 347-480 VAC	4 450mA 6 650mA 11 1150mA 16 1675mA 21 2100mA

Ordering guide (continued)

Driver Options	Surge Suppression	Spinning
DL ¹² DALI (default: logarithmic) N None	SP1 Parallel 10kV standard SP2 Parallel 20kV	F Fluted spinning N No options

Footnotes

- DL not available with B (347-480) voltage.
- DL not available with 4 (450mA) and 6 (650mA) drive currents.

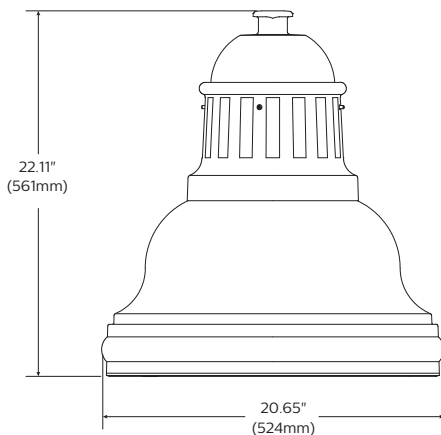
CXF14/CXF15 Westbrooke

Pendant

Dimensions

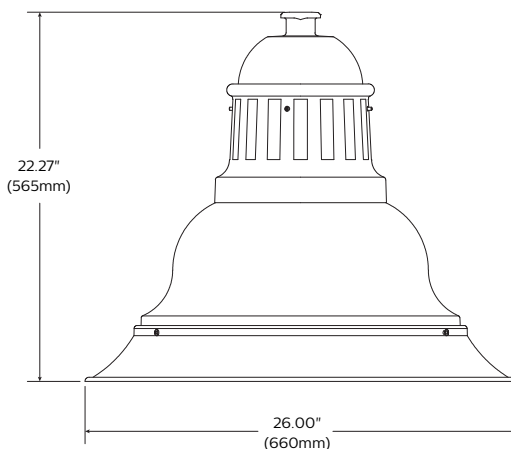
CXF14

- Width:** 21" diameter
- Height:** 22-5/16"
- EPA:** 1.6 sq. ft
- Weight:** 38 lbs (17.24 kg)
(maximum)



CXF15

- Width:** 26" diameter
- Height:** 22-5/16"
- EPA:** 1.6 sq. ft
- Weight:** 38 lbs (17.24 kg)
(maximum)



Note: Figures are shown with optional fluted spinning

Predicted Lumen Depreciation Data

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.

Ambient Temperature °C	Driver mA	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	2100mA	>100,000 hours	>60,000 hours	>87%

CXF14/CXF15 Westbrooke

Pendant

LED Wattage and Lumen Values: Westbrooke CXF14 / CXF15

4000K

Ordering Code	Total LEDs	LED Current (mA)	Average System Watts	Color Temp.	Type 1			Type 2		
					Delivered Lumens	Efficacy (LPW)	BUG Rating	Delivered Lumens	Efficacy (LPW)	BUG Rating
CXF14C-140-G1-740-4	140	450	21	4000K	2230	106	B1-U0-G1	2226	106	B1-U0-G1
CXF14C-140-G1-740-6	140	650	30	4000K	3120	104	B2-U0-G2	2906	97	B1-U0-G1
CXF14C-140-G1-740-11	140	1150	52	4000K	5309	102	B2-U0-G2	4946	95	B2-U0-G2
CXF14C-140-G1-740-16	140	1675	75	4000K	7292	97	B3-U0-G3	6792	91	B3-U0-G3
CXF14C-140-G1-740-21	140	2100	94	4000K	8847	94	B3-U0-G3	8242	88	B3-U0-G3

4000K (Continued)

Ordering Code	Total LEDs	LED Current (mA)	Average System Watts	Color Temp.	Type 3			Type 4			Type 5		
					Delivered Lumens	Efficacy (LPW)	BUG Rating	Delivered Lumens	Efficacy (LPW)	BUG Rating	Delivered Lumens	Efficacy (LPW)	BUG Rating
CXF14C-140-G1-740-4	140	450	21	4000K	2230	106	B1-U0-G1	2226	106	B1-U0-G1	2243	107	B1-U0-G1
CXF14C-140-G1-740-6	140	650	30	4000K	3120	104	B2-U0-G2	2906	97	B1-U0-G1	3138	105	B2-U0-G1
CXF14C-140-G1-740-11	140	1150	52	4000K	5309	102	B2-U0-G2	4946	95	B2-U0-G2	5340	103	B3-U0-G2
CXF14C-140-G1-740-16	140	1675	75	4000K	7292	97	B3-U0-G3	6792	91	B3-U0-G3	7334	98	B3-U0-G2
CXF14C-140-G1-740-21	140	2100	94	4000K	8847	94	B3-U0-G3	8242	88	B3-U0-G3	8899	95	B3-U0-G2

3000K

Ordering Code	Total LEDs	LED Current (mA)	Average System Watts	Color Temp.	Type 1			Type 2		
					Delivered Lumens	Efficacy (LPW)	BUG Rating	Delivered Lumens	Efficacy (LPW)	BUG Rating
CXF14C-140-G1-740-4	140	450	21	3000K	2230	106	B1-U0-G1	2226	106	B1-U0-G1
CXF14C-140-G1-740-6	140	650	30	3000K	3120	104	B2-U0-G2	2906	97	B1-U0-G1
CXF14C-140-G1-740-11	140	1150	52	3000K	5309	102	B2-U0-G2	4946	95	B2-U0-G2
CXF14C-140-G1-740-16	140	1675	75	3000K	7292	97	B3-U0-G3	6792	91	B3-U0-G3
CXF14C-140-G1-740-21	140	2100	94	3000K	8847	94	B3-U0-G3	8242	88	B3-U0-G3

3000K (continued)

Ordering Code	Total LEDs	LED Current (mA)	Average System Watts	Color Temp.	Type 3			Type 4			Type 5		
					Delivered Lumens	Efficacy (LPW)	BUG Rating	Delivered Lumens	Efficacy (LPW)	BUG Rating	Delivered Lumens	Efficacy (LPW)	BUG Rating
CXF14C-140-G1-740-4	140	450	21	3000K	2285	109	B1-U0-G1	2467	117	B1-U0-G1	2243	107	B1-U0-G1
CXF14C-140-G1-740-6	140	650	30	3000K	2983	99	B1-U0-G1	3221	107	B1-U0-G1	3138	105	B2-U0-G1
CXF14C-140-G1-740-11	140	1150	52	3000K	5077	98	B2-U0-G2	5481	105	B2-U0-G2	5340	103	B3-U0-G2
CXF14C-140-G1-740-16	140	1675	75	3000K	6972	93	B2-U0-G2	7528	100	B2-U0-G2	7334	98	B3-U0-G2
CXF14C-140-G1-740-21	140	2100	94	3000K	8460	90	B3-U0-G3	9134	97	B3-U0-G3	8899	95	B3-U0-G2

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.

CXF14/CXF15 Westbrooke

Pendant

Specifications:

Housing

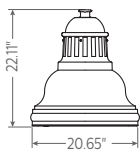
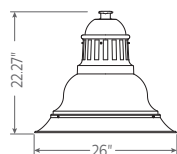
In a round shape, this housing is constructed of low copper die-cast aluminum and 0.090" thick spun aluminum. All non-ferrous fasteners prevent corrosion and ensure longer life.

Access-mechanism

The hinged lens frame is cast aluminum with a stainless steel spring latch for tool-less access

Mounting

T: Top arm mount



Light engine

Light guide technology provides low-glare, uniform illumination. Composed of 140 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 70. Also available in 2700K, 3500K, 5000K and Amber (>590nm) with extended lead times. Contact factory for details.

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.

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 an 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

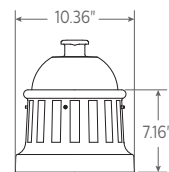
DALI: Pre-set driver compatible with the DALI logarithmic control system.

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.

Luminaire options

F: Fluted spinning



N: None

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Specifications (continued)

Wiring

Gauge 18 wires. Top mount option come with quick disconnects. Arm mount options provide a 6" Minimum exceeding from luminaire.

Hardware

All non-ferrous fasteners prevent corrosion and ensure longer life.

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. (48 LED and 64 LED@700mA is 82,000) 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 2008 and ISO 14001 2004 International Quality Standards Certification.

Certifications and Compliance

cETL listed to Canadian safety standards for wet locations. Manufactured to ISO 9001:2008 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. Westbrooke LED luminaires are DesignLights Consortium qualified.

Warranty

5 year extended warranty.

