

Urban

New Oxford







Hadco's New Oxford LED luminaire, featuring cutoff optics, offers ideal performance for street lighting in residential and historic urban settings. Blending this style with Philips Hadco's modular post top concept creates the flexibility for you to build your own look into the fixture.

| Project: | |
|-----------|------|
| Location: | |
| Cat.No: | |
| Туре: | |
| Lamps: | Qty: |
| Notes: | |

Ordering guide

example: VXO22 32 G2 A 2 N W A 3 N N N N SP1 N

| Series VX022 | LED count | | | | | Calan | | Drive | Integral Control Options ² | | Options | c | House | |
|---------------------|--|------------|--|--|---|---|---|--|--|--|---|--------------------------------------|--------------------------------------|---|
| | | Gen. | Finish | Optics | Photo Control | Color Temp | Voltage | Current (mA) | | No. 1 ² | No. 2 ² | No. 3 ² | Surge 3 ² Protection | Side Shield |
| | | G2 | | | | | | | | | | | | |
| VX022 New Oxford | 32 ¹³ 32 LEDs 48 48 LEDs 64 64 LEDs | G2 Gen2 | A Black B White G Verde H Bronze J Green | 2 Type 3 3 Type 3 3W Type 3 Wide 4 Type 4 5 Type 5 | E 120 VAC Button Eye H 208/240/ 277 VAC Button Eye R 3 Pin Twist Lock Receptacle R7 7 Pin Receptacle in cage N None | N Neutral 4000K W Warm 3000K | A 120-277 B ^{2,3} 347-480 | 3 350 5 530 7 700 11 1050 | Dynadimmer DA 4 Hrs, 25% reduction DB 4 Hrs, 50% reduction DC 4 Hrs, 75% reduction DB 6 Hrs, 25% reduction DE 6 Hrs, 50% reduction DF 6 Hrs, 50% reduction DG 8 Hrs, 75% reduction DG 8 Hrs, 25% reduction DJ 8 Hrs, 50% reduction DJ SHrs, 75% reduction DJ SHrs, 75% reduction DJ Sensor ready driver (standard configuration) SRD1 Sensor ready driver (alternative configuration) N None | AST Adjustable Start Up Time N None | CLO Constant Light Output N None | OTL Over The Life N None | SP1 10kV/10kA SP2 20kV/20kA | H House Side Shield N None |

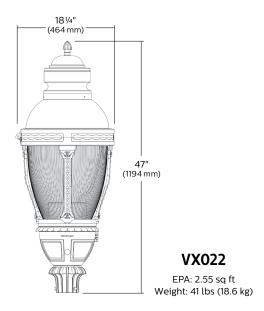
- 1. Only available with 32 LED and A voltage.
- 2. Configurations with 347-480VAC (B) voltage are not compatible with optional dimming or optional programming.
- $3. \ \ Configurations \ with \ 32 \ (32) \ LEDs \ at \ 350mA \ (3), 530mA \ (5) \ and \ 1050mA \ (1) \ currents \ are \ not \ compatible \ with \ 347-480 \ VAC \ (B) \ voltage \ (B) \ volt$



VX022 New Oxford

Post top

Dimensions



LED Wattage and Lumen Values: for VXO22

| | 150 | | Average | Type 2 | | | Type 3 | | Type 3w | | Type 4 | | | Type 5 | | | | |
|--------------------|---------------|------------------------|---------------------------------------|------------------------------|---------------|-----------------|------------------------------|---------------|-----------------|------------------------------|---------------|-----------------|------------------------------|---------------|-----------------|------------------|---------------|-----------------|
| Ordering Codes | Total LEDs | LED current (mA) | System Wattage ¹ (W) | Lumen Output ² | BUG Rating | Effic. (LPW) | Lumen Output² | BUG Rating | Effic. (LPW) |
| Clear Lens (3000K) | | | | | | | | | | | | | | | | | | |
| 32-G2-x-W3 | 32 | 350 | 36 | 2920 | B1-U3-G1 | 81 | 2865.3 | B1-U3-G1 | 80 | 2931 | B1-U3-G1 | 82 | 2854.7 | B1-U3-G1 | 80 | 2828.9 | B2-U3-G1 | 79 |
| 32-G2-x-W5 | 32 | 530 | 53 | 4188 | B1-U3-G1 | 79 | 4110 | B1-U3-G1 | 78 | 4204 | B1-U3-G1 | 80 | 4095 | B1-U3-G1 | 78 | 4058 | B3-U3-G1 | 77 |
| 32-G2-x-W7 | 32 | 700 | 71 | 5282 | B1-U3-G1 | 75 | 5183 | B1-U3-G1 | 73 | 5302 | B1-U3-G1 | 75 | 5164 | B1-U3-G1 | 73 | 5118 | B3-U3-G1 | 72 |
| 32-G2-x-W1 | 32 | 1050 | 108 | 7284 | B2-U3-G2 | 67 | 7148 | B2-U3-G2 | 66 | 7311 | B2-U3-G2 | 68 | 7121 | B2-U3-G2 | 66 | 7057 | B3-U3-G2 | 65 |
| 48-G2-x-W3 | 48 | 350 | 52 | 4380 | B1-U3-G1 | 84 | 4298 | B1-U3-G1 | 83 | 4397 | B1-U3-G1 | 85 | 4282 | B1-U3-G1 | 82 | 4243 | B3-U3-G1 | 82 |
| 48-G2-x-W5 | 48 | 530 | 79 | 6283 | B1-U3-G1 | 80 | 6165 | B1-U3-G1 | 78 | 6306 | B2-U3-G2 | 80 | 6142 | B1-U3-G2 | 78 | 6087 | B3-U3-G1 | 77 |
| 48-G2-x-W7 | 48 | 700 | 106 | 7924 | B2-U3-G2 | 75 | 7775 | B2-U3-G2 | 73 | 7953 | B2-U3-G2 | 75 | 7746 | B2-U3-G2 | 73 | 7676 | B3-U3-G2 | 72 |
| 64-G2-x-W3 | 64 | 350 | 68 | 5694 | B1-U3-G1 | 84 | 5538 | B1-U3-G1 | 81 | 5906 | B2-U3-G2 | 87 | 5677 | B1-U3-G1 | 83 | 5677 | B3-U3-G1 | 83 |
| 64-G2-x-W5 | 64 | 530 | 105 | 8168 | B2-U3-G2 | 77 | 7944 | B2-U3-G2 | 75 | 8471 | B2-U3-G2 | 80 | 8143 | B2-U3-G2 | 77 | 8144 | B3-U3-G2 | 77 |
| 64-G2-x-W7 | 64 | 700 | 140 | 10301 | B2-U3-G2 | 74 | 10019 | B2-U3-G2 | 72 | 10684 | B2-U3-G2 | 76 | 10270 | B2-U3-G2 | 73 | 10271 | B4-U3-G2 | 73 |
| Clear Lens (4 | юоок) | | | | | | | | | | | | | | | | | |
| 32-G2-x-N3 | 32 | 350 | 36 | 3281 | B1-U3-G1 | 91 | 3219 | B1-U3-G1 | 90 | 3293 | B1-U3-G1 | 92 | 3208 | B1-U3-G1 | 89 | 3179 | B2-U3-G1 | 89 |
| 32-G2-x-N5 | 32 | 530 | 53 | 4706 | B1-U3-G1 | 89 | 4618 | B1-U3-G1 | 88 | 4724 | B1-U3-G1 | 90 | 4601 | B1-U3-G1 | 87 | 4559 | B3-U3-G1 | 87 |
| 32-G2-x-N7 | 32 | 700 | 71 | 5935 | B1-U3-G1 | 84 | 5824 | B1-U3-G1 | 82 | 5958 | B2-U3-G2 | 84 | 5802 | B1-U3-G1 | 82 | 5750 | B3-U3-G1 | 81 |
| 32-G2-x-N1 | 32 | 1050 | 108 | 8184 | B2-U3-G2 | 76 | 8031 | B2-U3-G2 | 74 | 8215 | B2-U3-G2 | 76 | 8001 | B2-U3-G2 | 74 | 7929 | B3-U3-G2 | 73 |
| 48-G2-x-N3 | 48 | 350 | 52 | 4921 | B1-U3-G1 | 95 | 4829 | B1-U3-G1 | 93 | 4940 | B1-U3-G1 | 95 | 4811 | B1-U3-G1 | 93 | 4768 | B3-U3-G1 | 92 |
| 48-G2-x-N5 | 48 | 530 | 79 | 7059 | B2-U3-G2 | 89 | 6927 | B2-U3-G2 | 88 | 7086 | B2-U3-G2 | 90 | 6901 | B2-U3-G2 | 87 | 6839 | B3-U3-G2 | 87 |
| 48-G2-x-N7 | 48 | 700 | 106 | 8903 | B2-U3-G2 | 84 | 8736 | B2-U3-G2 | 82 | 8936 | B2-U3-G2 | 84 | 8704 | B2-U3-G2 | 82 | 8625 | B3-U3-G2 | 81 |
| 64-G2-x-N3 | 64 | 350 | 68 | 6398 | B1-U3-G1 | 94 | 6223 | B1-U3-G1 | 91 | 6636 | B2-U3-G2 | 97 | 6379 | B1-U3-G2 | 94 | 6379 | B3-U3-G1 | 94 |
| 64-G2-x-N5 | 64 | 530 | 105 | 9178 | B2-U3-G2 | 87 | 8926 | B2-U3-G2 | 85 | 9518 | B2-U3-G2 | 90 | 9150 | B2-U3-G2 | 87 | 9150 | B4-U3-G2 | 87 |
| 64-G2-x-N7 | 64 | 700 | 140 | 11575 | B2-U4-G2 | 83 | 11258 | B2-U3-G2 | 80 | 12004 | B3-U3-G3 | 86 | 11540 | B2-U3-G2 | 82 | 11540 | B4-U3-G2 | 82 |

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 - contact Applications at outdoorlighting applications@philips.com.

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

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Post top

Specifications

Housing

Roof: Assembled components made of 356HM low-copper cast aluminum alloy and 0.090" thick spun aluminum. Hinged roof with stainless steel thumb screw.

Globe: Narrow body globe is constructed of clear injection-molded vertically ribbed U.V. stabilized acrylic. The bottom section of the globe has a neck opening of 7 3/8" and an oursideneck diameter of 8". Globe (less roof) has a 13 3/4" H x 14 3/4" W.

Cage: Assembled components made of 356HM low-copper cast aluminum alloy.

Fitter/Pod: 360 low-copper die-cast aluminum. Tool less access to the wiring compartment. The optional photo control eye is located in the ballast enclosure for easy access via a hinged door. Slip Fitter Dimensions: 3"I.D. x 3" deep.

Fasteners

Used to secure post fitter to post tenon and globe to globe holder. Allen Head bolts feature Black cadmium stainless steel.

Finial

Finial is cast aluminum mounted with a 1/4-20 stainless steel fastener. Standard finial finish will match fixture finish as specified. Finish is thermoset powdercoat.

Light Engine

LEDgine is composed of five main components: Heat Sink, Lens, LED lamp, Optical System, and Driver. Electrical components are ROHS compliant.

LED Module

Composed of high-performance white LEDs. Color temperature as per ANSI/NEMA bin - Neutral White, 4000 Kelvin nominal (3985K +/- 275K or 3710K to 4260K) or Warm White, 3000 Kelvin nominal (3045K +/- 175K or 2870K to 3220K), CRI 70 Min. 75 Typical.

Heat Sink

Made of cast aluminum optimizing the LEDs efficiency and life. Product does not use any cooling device with moving parts (only passive cooling device).

Optical System

Type 2, 3, 3W 4 and 5 are composed of high performance optical grade PMMA acrylic refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. Optical system is rated IP66. Performance shall be tested per LM 63, LM 79 and TM 15 (IESNA) certifying its photometric performance. Street side indicated.

Driver

Driver comes standard with 0-10V dimming capability. High power factor of 95%. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. Certified in compliance to UL1012 cULus requirement (dry and damp location). Assembled on a removable twist lock cover with Tyco quick disconnect plug resisting to 221°F (105°C). 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).

Driver Options

AST: Pre-set driver for progressive start-up of the LED module(s) to optimize energy management and enhance visual comfort at start-up.

CLO: Pre-set driver to manage the lumen depreciation by adjusting the power given to the LEDs offering the same lighting intensity during the entire lifespan of the LED module.

OTL: Pre-set driver to signal end of life of the LED module(s) for better fixture management.

DALI: Pre-set driver compatible with DALI contorl 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.

Dimming Options

DA: 4 Hrs 25% Reduction
DB: 4 Hrs 50% Reduction
DC: 4 Hrs 75% Reduction
DD: 6 Hrs 25% Reduction
DE: 6 Hrs 50% Reduction
DF: 6 Hrs 75% Reduction
DF: 8 Hrs 25% Reduction
DH: 8 Hrs 50% Reduction
DJ: 8 Hrs 75% Reduction
DJ: 8 Hrs 75% Reduction
DJ: DL: 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. 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 @25C. 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 51 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.

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Specifications (continued)

Vibration Resistance

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

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.

Listed

On the DesignLightsTM Consortium (DLC) Qualified Products List (QPL).

The LED optics chamber is IP66 rated.

Warranty

5 year extended warranty.

LED Performance

| Predicted lumen depreciation data ¹ | | | | | | | | | | | |
|--|--------------|--|--|---------------------------------------|--|--|--|--|--|--|--|
| Ambient Temperature (°C) | Driver mA | Calculated L ₇₀ hours ^{1,2} | L ₇₀ per TM-21 ^{2,3} | Lumen Maintenance % @ 60,000 hours | | | | | | | |
| 25°C | up to 700 mA | >100,000 | >60,000 | >92% | | | | | | | |
| 25°C | 1050 mA | >100,000 | >60,000 | >89% | | | | | | | |

^{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.} L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output. 3. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours.