LUMEC
by signify

Urban

Optima

OT10-C/OT20-C
Post Top

Lumec **Optima** LED post top and pedant luminaires are the perfect choice for urban projects such as streets, walkways and public spaces that compel that extra little bit of detail. This timeless luminaire is made from top-quality materials, is easy to maintain, and adds a distinctive decorative aspect to any contemporary environment. Paired with the latest LED technology, its IP66 rating, multiple lumen outputs, various luminaire style options and energy-saving control options are well suited to meet wide range of project requirements.

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

Ordering guide

example: OT10-C-140L650NW-G1-3-UNV-DMG-BKTX

Series	LED module	Gen.	Optical system	Ballast	Driver options [3]	Luminaire options		Poles / Brackets	Finish
OT10-C **OT20-C**	**3000K** **140L450WW**[5] **140L650WW**[5] **140L1150WW** **140L1675WW** **140L2100WW** **4000K** **140L450NW**[5] **140L650NW**[5] **140L1150NW** **140L1675NW** **140L2100NW**	**G1** Gen1	**1** Type I (ASYM) **2** Type II (ASYM) **3** Type III (ASYM) **4** Type IV (ASYM) **5** Type V (SYMM)	**UNV** 120-277VAC **347** 347VAC **480** 480VAC	**CDMGE25**[1] Economy 8 hrs. 25% reduction **CDMGE50**[1] Economy 8 hrs. 50% reduction **CDMGE75**[11] Economy 8 hrs. 75% reduction **CDMGM25**[1] Median 6 hrs. 25% reduction **CDMGM50**[1] Median 6 hrs. 50% reduction **CDMGM75**[1] Median 6 hrs. 75% reduction **CDMGS25**[1] Safety 4 hrs. 25% reduction **CDMGS50**[1] Safety 4 hrs. 50% reduction **CDMGS75**[1] Safety 4 hrs. 75% reduction **DMG** 0-10V **SRD**[1] Sensor ready driver, standard configuration **SRD1**[1] Sensor ready driver, alternate configuration	**DA** Decorative arches **DC** Decorative cap **DFN10** Decorative Coupola **DFN20** Decorative Coupola **FN1**[7] Decorative finial **FN10**[7] Decorative finial **FN2**[7] Decorative finial **FN3**[7] Decorative finial **FN5**[7] Decorative finial **FN6**[7] Decorative finial **FN8**[7] Decorative finial **FN9**[7] Decorative finial	**FNC**[7] Decorative finial painted copper **PH8**[4,7] Twist-lock Photoelectric Cell **PHXL**[1,7] Twist-lock Photoelectric Cell, extended life, UNV (120-277VAC) **PH9**[4,7] Shorting cap **RC**[1,7] Receptacle for twist-lock photocell or shorting cap, 3-pin **RCD7**[6] Receptacle 7-pin **SP2** 20kV/10kA Surge Protector (optional) **TN2.87** 2 7/8" dia. Tenon adaptor **TN3** 3" dia. Tenon adaptor **TN3.5** 3" 1/2 dia. Tenon adaptor	Consult with Signify.com/luminaires for details and the complete line of poles and brackets.	**Textured** **BE2TX** Midnight Blue **BE6TX** Ocean Blue **BE8TX** Royal Blue **BG2TX** Sandstone **BKTX** Black **BRTX** Bronze **GN4TX** Blue Green **GN6TX** Forest Green **GN8TX** Dark Forest Green **GNTX** Green **GY3TX** Medium Grey **RD2TX** Burgundy **RD4TX** Scarlet **WHTX** White **Other** **GR** Gray Sandtex **NP** Natural Aluminum **TG** Hammertone Gold

1. Not available with **347V and 480V**.
2. Use of photoelectric cell or shorting cap is required to ensure proper illumination.
3. Select either **CDMG** or **DMG** mandatory option.
4. RC must be selected for this option
5. For 240 or 277 volt with **CDMG** options consult factory.
6. The **RCD7** is located on top of the roof in place of the finial for use with a control node.
7. Not available with **RCD7**.

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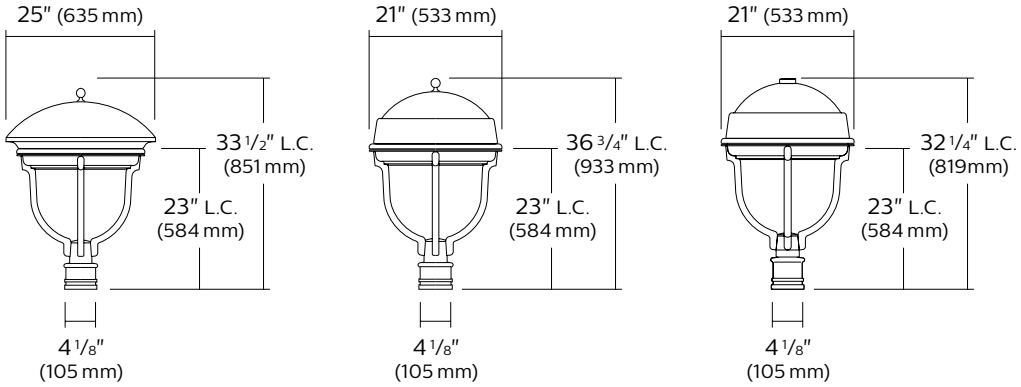
Dimensions



OT10-C

EPA: 1.74 sq.ft.
Weight: 40.5 lbs. (18 kg)

OT20-C

EPA: 1.42 sq.ft.
Weight: 40.5 lbs. (18 kg)

OT20-RCD7

EPA: 1.42 sq.ft.
Weight: 40.5 lbs. (18 kg)

LED Wattage and Lumen Values: for OT10-C/OT20-C

3000K

Ordering Code: Flat lens (3000K)	Total LEDs	LED current (mA)	Average System Wattage (W)	Type 1			Type 2			Type 3		
				Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
140L450WW-G1	140	450	21	1916	91	B1-U0-G1	1930	92	B1-U0-G1	2029	97	B1-U0-G1
140L650WW-G1	140	650	30	2680	89	B2-U0-G2	2520	84	B1-U0-G1	2649	88	B1-U0-G1
140L1150WW-G1	140	1150	52	4562	88	B2-U0-G2	4288	82	B2-U0-G2	4508	87	B2-U0-G2
140L1675WW-G1	140	1675	75	6265	84	B3-U0-G3	5889	79	B3-U0-G3	6191	83	B2-U0-G2
140L2100WW-G1	140	2100	94	7602	81	B3-U0-G3	7146	76	B3-U0-G3	7512	80	B3-U0-G3

Ordering Code: Flat lens (4000K)	Total LEDs	LED current (mA)	Average System Wattage (W)	Type 4			Type 5		
				Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
140L450WW-G1	140	450	21	2110	100	B1-U0-G1	1976	94	B1-U0-G1
140L650WW-G1	140	650	30	2755	92	B1-U0-G1	2764	92	B2-U0-G1
140L1150WW-G1	140	1150	52	4688	90	B2-U0-G2	4705	90	B3-U0-G2
140L1675WW-G1	140	1675	75	6438	86	B2-U0-G2	6461	86	B3-U0-G2
140L2100WW-G1	140	2100	94	7812	83	B3-U0-G3	7840	83	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 - contact Applications at signify.com/outdoorluminaires.
Note: Some data may be scaled based on tests of similar. But not identical luminaires.

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LED Wattage and Lumen Values: for OT10-C/OT20C

4000K

Ordering Code: Flat lens (3000K)	Total LEDs	LED current (mA)	Average System Wattage (W)	Type 1			Type 2			Type 3		
				Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
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140L1675WW-G1	140	1675	75	6265	84	B3-U0-G3	5889	79	B3-U0-G3	6191	83	B2-U0-G2
140L2100WW-G1	140	2100	94	7602	81	B3-U0-G3	7146	76	B3-U0-G3	7512	80	B3-U0-G3

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Specifications

Housing

Finial: Decorative cast 356 aluminum, mechanically assembled.

Cupola: Decorative spun aluminum 1100 0, mechanically mounted on hood.

Hood: Spun aluminum 1100 0 dome, mechanically assembled on the luminaire.

Guard: In a round shape with 4 arms, this guard is a one piece cast aluminum 356 welded to the fitter.

Access-mechanism

A die cast A360 aluminum technical ring with latch, hinge and a cast in decorative skirt. The mechanism shall offer tool free access to the inside of the luminaire. An embedded memory retentive gasket shall ensure weatherproofing.

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.

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 or 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 CDMG, driver is class 1.

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 2100 mA	>100,000	>60,000	83%

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.

Surge Protection

Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 0kV/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. SP2 20kV/10kA optional.

Driver options

DMG: Dimmable driver 0-10V.

CDMG: Dynadimmer standard dimming functionalities including pre-programmed scenarios to suit many applications and needs from safety to maximum energy savings.

Order Code	Dimming		
	Scenario	Duration	Level
CDMGS25	Safety	4 hours	25%
CDMGS50	Safety	4 hours	50%
CDMGS75	Safety	4 hours	75%
CDMGM25	Median	6 hours	25%
CDMGM50	Median	6 hours	50%
CDMGM75	Median	6 hours	75%
CDMGE25	Economy	8 hours	25%
CDMGE50	Economy	8 hours	50%
CDMGE75	Economy	8 hours	75%

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.

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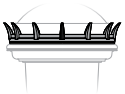
Urban Luminaire

Specifications (continued)

Luminaire options



DA
Decorative arches

DC
Decorative cap

DF10 Decorative cupola (DF10 with OT10)

DF20 Decorative cupola (DF20 with OT20)

FN1 Decorative finial

FN2 Decorative finial

FN3 Decorative finial

FN5 Decorative finial

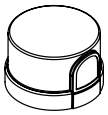
FN6 Decorative finial

FN8 Decorative finial

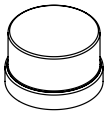
FN9 Decorative finial

FN10 Decorative finial

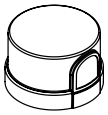
FNC Decorative finial painted copper



PH8
Photoelectric cell, twist-lock type.
Allows 90° rotation



PH9
Shorting cap, twist-lock type

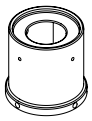


PHXL
Extended life Photoelectric cell, twist-lock type
Allows 90° rotation

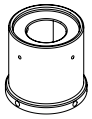
RC
Receptacle
3-pins

RCD7
Receptacle
7-pins

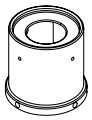
SP2 20kV/10kA integral surge protector (optional)



TN2.875C
2-7/8" dia.
tenon adaptor



TN3
3" dia.
tenon adaptor



TN3.5
3-1/2" dia.
tenon adaptor

Fitter

Cast 356 aluminum c/w 4 set screws 3/8 16 UNC. This fitter holds 2 arms made of cast aluminum 356 mechanically assembled. Slip fits on a 4" (102mm) outside diameter X 4" (102mm) long tenon.

Finish

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.

Textured Finish Options:

BE2TX: Textured Midnight Blue
BE6TX: Textured Ocean Blue
BE8TX: Textured Royal Blue
BG2TX: Textured Sandstone
BKTX: Textured Black
BRTX: Textured Bronze
GN4TX: Textured Blue Green
GN6TX: Textured Forest Green
GN8TX: Textured Dark Forest Green
GNTX: Textured Green
GY3TX: Textured Medium Grey
RD2TX: Textured Burgundy
RD4TX: Textured Scarlet
WHTX: Textured White

Non-Textured Finish Options:

GR: Gray Sandtex
NP: Natural Aluminum
TG: Hammer-tone Gold

Wiring

Gauge (#14) TEW/AWM 1015 or 1230 wires, 6" (152mm) minimum exceeding from luminaire.

Hardware

All exposed screws shall be complete with Ceramic primer-seal base coat to reduce seizing of the parts and offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

Quality Control

Manufactured to ISO 9001 2008 standards and ISO 14001-2004 International Quality Standards Certification.

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.

Certifications and Compliance

CSA, cULus Listed for Canada and USA. Ancestra LED luminaires are DesignLights Consortium qualified.

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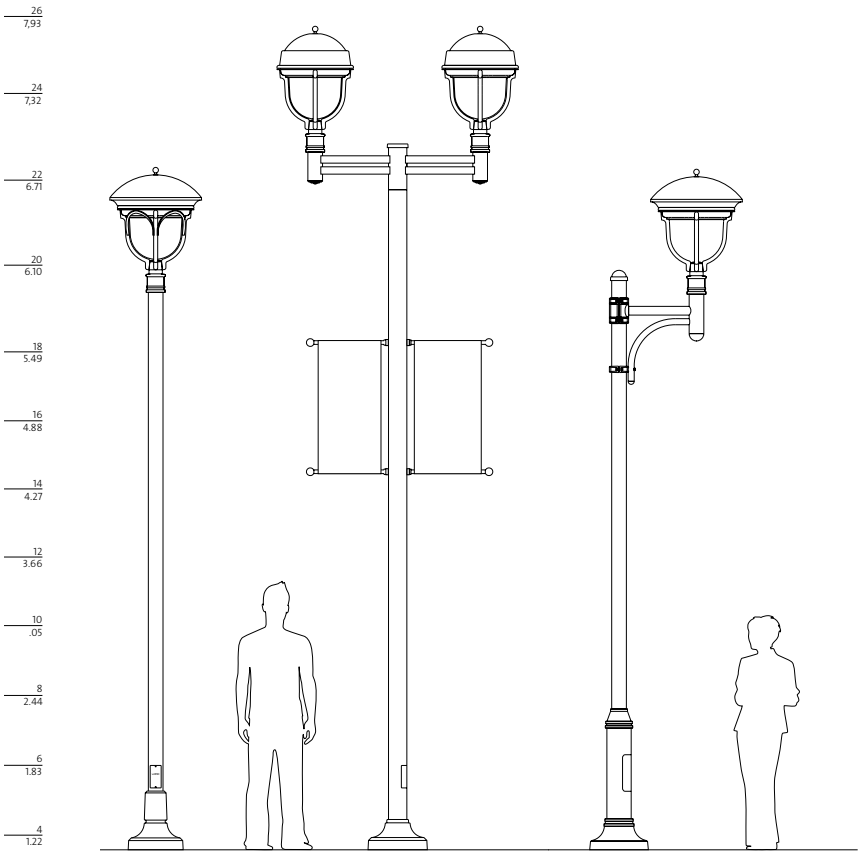
Urban Luminaire

Poles



OT10-C-DA
Pole: APR4-LBC2

OT20-C
Mounting: JR-2
Pole: APR5-LBC4S-BA

OT10-C
Mounting: M30-1A
Pole: RAF805

Consult signify.com/outdoorluminaires for details and the complete line of Signify poles and brackets.

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