

Urban

Optima

OT10-OT20 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:		
Туре:		
Lamps:	Qty:	
Notes:		

Ordering guide

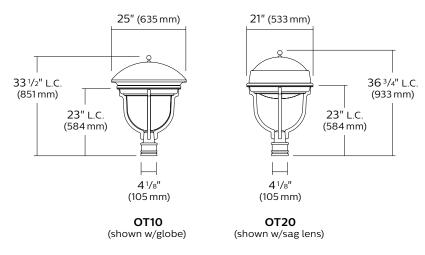
example: OT10-72W32LED3K-G2-ACDR-LE3A-120-DMG-RC-GN8TX

eries	LED module	Gen.	Globe	Optical system	Voltage	Driver options	Luminaire options		Poles/Brackets	Finish
		G2								
Glob	3000K 35W32LED3K¹ 55W32LED3K¹ 55W48LED3K 72W32LED3K 80W48LED3K 4000K 35W32LED4K¹ 55W32LED4K¹ 55W32LED4K¹ 72W32LED4K 80W48LED4K 72W32LED4K 80W48LED4K	s require	ACDR Acrylic Globe	LE2A ² Type II (ASYM) W/globe LE3A ² Type III (ASYM) W/globe LE4A ² Type IV (ASYM) W/globe LE2F Type II (ASYM) W/flat glass lens LE2S Type II (ASYM) W/sag glass lens LE3F Type III (ASYM) W/sag glass lens LE3F Type III (ASYM) W/sag glass lens LE4F Type IV (ASYM) W/sag glass lens LE4F Type IV (ASYM) W/sag glass lens LE4S Type IV (ASYM) W/sag glass lens LE5S ³ Type V (SYMM) W/sag glass lens	120 208 240 277 347 480	AST¹ Pre-set driver for progressive start-up CDMGE25¹ 8 hrs. 25% reduction CDMGE50¹ 8 hrs. 50% reduction CDMGE75¹ 8 hrs. 75% reduction CDMGM25¹ 6 hrs. 25% reduction CDMGM50¹ 6 hrs. 50% reduction CDMGM550¹ 4 hrs. 75% reduction CDMGS50¹ 4 hrs. 25% reduction CDMGS50¹ 4 hrs. 75% reduction CDMGS50¹ CDMGS75¹ CDMGS	HS House side shield PH8 Photoelectric cell PH9 Shorting cap PHXL Photoelectric cell, extended life RC ⁴ Receptacle 3-pins SP2 (optional) 20kV/20kA surge protector TN2.875C 2-7/8" dia. tenon adaptor TN3 3" dia. tenon adaptor TN3.5 3-1/2" dia. tenon adaptor	Decorative items DA Decorative arches DC Decorative cap DF10 Decorative Coupola DF20 Decorative Coupola 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	Consult with signify.com/ outdoorluminaires for details and the complete line of Signify poles and brackets.	Textured BEZTX Midnight Blue BE6TX Ocean Blue BE8TX Royal Blue BG2TX Sandstone BKTX Black BRTX Black BRTX Bronze GN4TX Blue Green GN6TX Forest Green GN8TX Dark Forest Green GY3TX Medium Grey RD2TX Burgundy RD4TX Scarlet WHTX White Other GR Gray Sandtex NP Natural Aluminur TG Hammertone Gold

Note: If DALI or 5 or 7 pin receptacle is required contact factory

Urban Luminaire

Dimensions



EPA: 1.74 sq.ft. EPA: 1.42 sq.ft. Weight: 47 lbs. (21.3 kg) Weight: 47 lbs. (21.3 kg)

LED Wattage and Lumen Values: for OT10-20 with Flat lens

			Average				LE3F			LE4F			LE5F		
Ordering Code: Flat lens (3000K)	Total LEDs		System Wattage ¹ (W)	Lumen Output²	Efficacy (LPW)	BUG Rating									
OTx-35W32LED3K-G2	32	350	37	3128	85	B1-U0-G1	3114	84	B1-U0-G1	3082	83	B1-U0-G1	3155	85	B2-U0-G1
OTx-55W32LED3K-G2	32	530	54	4487	83	B1-U0-G1	4467	83	B1-U0-G1	4421	82	B1-U0-G1	4525	84	B3-U0-G1
OTx-72W32LED3K-G2	32	700	73	5659	78	B1-U0-G1	5633	77	B1-U0-G1	5575	76	B1-U0-G1	5707	78	B3-U0-G1
OTx-55W48LED3K-G2	48	350	54	4692	87	B1-U0-G1	4671	87	B1-U0-G1	4623	86	B1-U0-G1	4733	88	B3-U0-G1
OTx-80W48LED3K-G2	48	530	80	6730	84	B1-U0-G1	6700	84	B1-U0-G1	6631	83	B1-U0-G2	6788	85	B3-U0-G1

		Average					LE3F			LE4F			LE5F		
Ordering Code: Flat lens (4000K)	Total LEDs		System Wattage ¹ (W)	Lumen Output²	Efficacy (LPW)	BUG Rating	Lumen Output²	Efficacy (LPW)		Lumen Output²	Efficacy (LPW)	BUG Rating	Lumen Output ²	Efficacy (LPW)	BUG Rating
OTx-35W32LED4K-G2	32	350	37	3503	95	B1-U0-G1	3488	94	B1-U0-G1	3452	93	B1-U0-G1	3534	96	B2-U0-G1
OTx-55W32LED4K-G2	32	530	54	5025	93	B1-U0-G1	5003	93	B1-U0-G1	4951	92	B1-U0-G1	5069	94	B3-U0-G1
OTx-72W32LED4K-G2	32	700	73	6338	87	B1-U0-G1	6309	86	B1-U0-G1	6244	86	B1-U0-G2	6392	88	B3-U0-G1
OTx-55W48LED4K-G2	48	350	54	5255	97	B1-U0-G1	5232	97	B1-U0-G1	5178	96	B1-U0-G1	5300	98	B3-U0-G1
OTx-80W48LED4K-G2	48	530	80	7538	94	B2-U0-G1	7504	94	B1-U0-G2	7427	93	B1-U0-G2	7603	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 – 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 OT10-20 with Sag lens

			Average				LE3S			LE4S			LE5S		
Ordering Code: Sag lens (3000K)	Total LEDs		System Wattage ¹ (W)	Lumen Output ²	Efficacy (LPW)	BUG Rating									
OTx-35W32LED3K-G2	32	350	37	3233	87	B1-U0-G1	3153	85	B1-U0-G1	3130	85	B1-U0-G1	3259	88	B2-U0-G1
OTx-55W32LED3K-G2	32	530	54	4637	86	B1-U0-G1	4523	84	B1-U0-G1	4490	83	B1-U0-G1	4675	87	B3-U0-G1
OTx-72W32LED3K-G2	32	700	73	5849	80	B1-U0-G1	5704	78	B1-U0-G1	5662	78	B1-U0-G2	5896	81	B3-U0-G1
OTx-55W48LED3K-G2	48	350	54	4850	90	B1-U0-G1	4730	88	B1-U0-G1	4695	87	B1-U0-G1	4889	91	B3-U0-G1
OTx-80W48LED3K-G2	48	530	80	6956	87	B1-U0-G1	6784	85	B1-U0-G2	6734	84	B1-U0-G2	7012	88	B3-U0-G2

			Average		LE2S			LE3S			LE4S			LE5S		
Ordering Code: Sag lens (4000K)	Total LEDs		System Wattage ¹ (W)	Lumen Output²	Efficacy (LPW)	BUG Rating										
OTx-35W32LED4K-G2	32	350	37	3621	98	B1-U0-G1	3531	95	B1-U0-G1	3506	95	B1-U0-G1	3650	99	B3-U0-G1	
OTx-55W32LED4K-G2	32	530	54	5194	96	B1-U0-G1	5065	94	B1-U0-G1	5028	93	B1-U0-G2	5236	97	B3-U0-G1	
OTx-72W32LED4K-G2	32	700	73	6550	90	B1-U0-G1	6388	88	B1-U0-G2	6342	87	B1-U0-G2	6603	90	B3-U0-G2	
OTx-55W48LED4K-G2	48	350	54	5431	101	B1-U0-G1	5297	98	B1-U0-G1	5258	97	B1-U0-G2	5475	101	B3-U0-G1	
OTx-80W48LED4K-G2	48	530	80	7791	97	B2-U0-G2	7598	95	B1-U0-G2	7543	94	B1-U0-G2	7853	98	B3-U0-G2	

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LED Wattage and Lumen Values: for OT10-20 with Globe

			Average		LE2A			LE3A		LE4A			
Ordering Code: Globe (3000K)	Total LEDs	LED current (mA)	System Wattage ¹ (W)	Lumen Output²	Efficacy (LPW)	BUG Rating	Lumen Output ²	Efficacy (LPW)	BUG Rating	Lumen Output²	Efficacy (LPW)	BUG Rating	
OTx-35W32LED3K-G2	32	350	37	2759	75	B1-U3-G1	2601	70	B1-U2-G1	2794	76	B1-U2-G1	
OTx-55W32LED3K-G2	32	530	54	3958	73	B1-U3-G1	3730	69	B1-U3-G1	4008	74	B1-U3-G1	
OTx-72W32LED3K-G2	32	700	73	4992	68	B1-U3-G1	4705	64	B1-U3-G1	5055	69	B1-U3-G2	
OTx-55W48LED3K-G2	48	350	54	4139	77	B1-U3-G1	3901	72	B1-U3-G1	4192	78	B1-U3-G1	
OTx-80W48LED3K-G2	48	530	80	5937	74	B1-U3-G1	5596	70	B1-U3-G1	6012	75	B1-U3-G2	

			Average		LE2A			LE3A		LE4A			
Ordering Code: Globe (4000K)	Total LEDs		System Wattage ¹ (W)	Lumen Output ²	Efficacy (LPW)	BUG Rating	Lumen Output ²	Efficacy (LPW)	BUG Rating	Lumen Output ²	Efficacy (LPW)	BUG Rating	
OTx-35W32LED4K-G2	32	350	37	3559	96	B1-U3-G1	2913	79	B1-U2-G1	3130	85	B1-U2-G1	
OTx-55W32LED4K-G2	32	530	54	5105	95	B1-U3-G1	4178	77	B1-U3-G1	4489	83	B1-U3-G2	
OTx-72W32LED4K-G2	32	700	73	6439	88	B1-U3-G1	5269	72	B1-U3-G1	5662	78	B1-U3-G2	
OTx-55W48LED4K-G2	48	350	54	5339	99	B1-U3-G1	4369	81	B1-U3-G1	4695	87	B1-U3-G2	
OTx-80W48LED4K-G2	48	530	80	7658	96	B2-U3-G2	6267	78	B1-U3-G2	6734	84	B1-U3-G2	

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Urban Luminaire

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 and hinge. The mechanism shall offer tool free access to the inside of the luminaire. An embedded memory retentive gasket shall ensure weatherproofing.

Light engine

LEDgine composed of 5 main components: Heat Sink / Lens / LED lamp / Driver / Optical System. Electrical components are RoHS compliant.

LED engine

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.

Lens

LExF / LExS: Made of soda lime tempered glass lens, mechanically assembled and sealed onto the lower part of the heat sink.

LExA (Globe): Made of one-piece seamless injection-molded impact-resistant (DR) acrylic having an inner prismatic surface. The globe is mechanically assembled and sealed onto the lower part of the heat sink.

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

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



Prismatic globe: IP66 rated optical system, composed of individual pre-oriented lens to achieve desired distribution, assembled with globe having an inner prismatic surface permanently sealed onto the lower part of the heat sink.

LE2A - Type II (ASYM) with globe (ACDR)

LE3A - Type III (ASYM) with globe (ACDR)

LE4A - Type IV (ASYM) with globe (ACDR)



Sag lens: IP66 rated optical system, composed of individual pre-oriented

lens to achieve desired distribution, assembled with a tempered-glass sag lens permanently sealed onto the lower part of the heat sink.

LE2S - Type II (ASYM) with sag glass lens

LE3S - Type III (ASYM) with sag glass lens

LE4S - Type IV (ASYM) with sag glass lens

LE5S - Type V (SYMM) with sag glass lens



Flat lens: IP66 rated optical system, composed of individual preoriented

lens to achieve desired distribution, assembled with a tempered-glass flat lens permanently sealed onto the lower part of the heat sink.

LE2F - Type II (ASYM) with flat glass lens

LE3F - Type III (ASYM) with flat glass lens

LE4F - Type IV (ASYM) with flat glass lens LE5F - Type V (SYMM) with flat glass lens

Driver

Driver comes standard with dimming compatible 0-10V. High power factor of 90% minimum. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max.

Maximum ambient operating temperature from 40°F (40°C) to 130°F (55°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). 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

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.

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

* Contact factory for DALI options.

Order	D	imming	
Code	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%

Surge protector

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. SP2 20kV/20kA optional.

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	700 mA	>100.000	>60.000	86%						

^{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.

Urban Luminaire

Specifications (continued)

Luminaire options



Decorative arches



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



Decorative finial painted copper



HS

House side shield



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

SP2

20kV/20kA 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: Grav Sandtex NP: Natural Aluminum TG: Hammer-tone Gold

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 life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion. Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +35°C / +95°F.

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.

Wiring

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

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 51 and ANSI/ ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Quality control

Consortium qualified

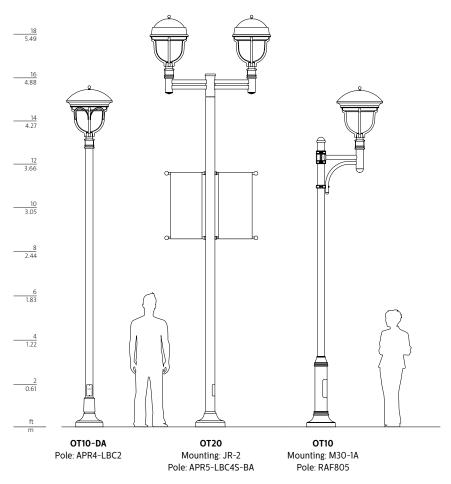
Manufactured to ISO 9001 2008 standards and ISO 14001-2004 International Quality Standards Certification.

Certifications and Compliance

CSA, cULus Listed for Canada and USA. Luminaires are DesignLights

Urban Luminaire

Poles



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

