

## Urban

### Transit

### TR10 Post Top





The versatility and character of Lumec **Transit L**ED post top and pendant luminaires is clear. Combining stunning industrial looks with outstanding photometric performance, the Transit luminaires blend modern and traditional style with leading-edge engineering that have made Lumec luminaires the perfect choice for effective urban area lighting.

Project:		
Location:		
Cat.No:		
Туре:		
Lamps:	Qty:	
Neterio		

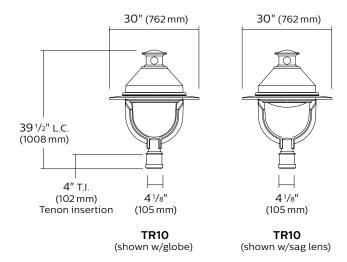
#### Ordering guide

example: TR10-72W32LED4K-G2-ACDR-LE3A-120-DMG-SMB-RC-BKTX

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

## **Urban Luminaire**

#### **Dimensions**



#### LED Wattage and Lumen Values: for TR10 with Flat lens

	Average						LE3F				LE4F		LE5F		
Ordering Code: Flat lens (3000K)	Total LEDs		System Wattage <sup>1</sup> (W)	Lumen Output²	Efficacy (LPW)	BUG Rating	Lumen Output <sup>2</sup>	Efficacy (LPW)	BUG Rating	Lumen Output²	Efficacy (LPW)	BUG Rating	Lumen Output²	Efficacy (LPW)	BUG Rating
TR10-35W32LED3K-G2	32	350	37	3072	83	B1-U0-G1	3086	83	B1-U0-G1	3116	84	B1-U0-G1	3143	85	B2-U0-G2
TR10-55W32LED3K-G2	32	530	55	4418	80	B1-U0-G1	4438	81	B1-U0-G1	4481	81	B1-U0-G1	4520	82	B3-U0-G3
TR10-72W32LED3K-G2	32	700	71	5460	77	B1-U0-G1	5511	78	B1-U0-G1	5598	79	B1-U0-G2	5634	79	B3-U0-G3
TR10-55W48LED3K-G2	48	350	53	4510	85	B1-U0-G1	4553	86	B1-U0-G1	4625	87	B1-U0-G1	4654	88	B3-U0-G3
TR10-80W48LED3K-G2	48	530	80	6452	81	B1-U0-G1	6513	81	B1-U0-G1	6616	83	B1-U0-G2	6658	83	B3-U0-G3

			Average		LE2F			LE3F			LE4F		LE5F		
Ordering Code: Flat lens (4000K)	Total LEDs		System Wattage <sup>1</sup> (W)	Lumen Output²	Efficacy (LPW)	BUG Rating	Lumen Output <sup>2</sup>	Efficacy (LPW)	BUG Rating	Lumen Output <sup>2</sup>	Efficacy (LPW)	BUG Rating	Lumen Output <sup>2</sup>	Efficacy (LPW)	BUG Rating
TR10-35W32LED4K-G2	32	350	37	3370	91	B1-U0-G1	3389	92	B1-U0-G1	3418	92	B1-U0-G1	3448	93	B2-U0-G2
TR10-55W32LED4K-G2	32	530	55	4847	88	B1-U0-G1	4874	89	B1-U0-G1	4916	89	B1-U0-G1	4959	90	B3-U0-G3
TR10-72W32LED4K-G2	32	700	71	5990	84	B1-U0-G1	6046	85	B1-U0-G1	6141	86	B1-U0-G2	6181	87	B3-U0-G3
TR10-55W48LED4K-G2	48	350	53	4948	93	B1-U0-G1	4995	94	B1-U0-G1	5073	96	B1-U0-G1	5106	96	B3-U0-G3
TR10-80W48LED4K-G2	48	530	80	7079	88	B1-U0-G1	7146	89	B1-U0-G2	7258	91	B1-U0-G2	7305	91	B3-U0-G3

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.

## **Urban Luminaire**

#### **LED Wattage and Lumen Values:** for TR10 with Sag lens

		LED	Average LE2S					LE3S			LE4S			LE5S		
Ordering Code: Sag lens (3000K)	Total LEDs	current	System Wattage <sup>1</sup> (W)	Lumen Output²	Efficacy (LPW)	BUG Rating										
TR10-35W32LED3K-G2	32	350	37	3062	83	B1-U0-G1	3113	84	B1-U0-G1	3157	85	B1-U0-G1	3208	87	B2-U0-G2	
TR10-55W32LED3K-G2	32	530	55	4403	80	B1-U0-G1	4477	81	B1-U0-G1	4540	83	B1-U0-G1	4613	84	B3-U0-G3	
TR10-72W32LED3K-G2	32	700	71	5543	78	B1-U0-G1	5635	79	B1-U0-G1	5716	81	B1-U0-G2	5808	82	B3-U0-G3	
TR10-55W48LED3K-G2	48	350	53	4580	86	B1-U0-G1	4656	88	B1-U0-G1	4722	89	B1-U0-G1	4798	91	B3-U0-G3	
TR10-80W48LED3K-G2	48	530	80	6552	82	B1-U0-G1	6660	83	B1-U0-G2	6755	84	B1-U0-G2	6864	86	B3-U0-G3	

			Average		LE2S			LE3S			LE4S		LE5S		
Ordering Code: Sag lens (4000K)	Total LEDs		System Wattage <sup>1</sup> (W)	Lumen Output <sup>2</sup>	Efficacy (LPW)	BUG Rating									
TR10-35W32LED4K-G2	32	350	37	3359	91	B1-U0-G1	3412	92	B1-U0-G1	3464	94	B1-U0-G1	3519	95	B3-U0-G3
TR10-55W32LED4K-G2	32	530	55	4831	88	B1-U0-G1	4907	89	B1-U0-G1	4981	91	B1-U0-G2	5061	92	B3-U0-G3
TR10-72W32LED4K-G2	32	700	71	6082	86	B1-U0-G1	6178	87	B1-U0-G2	6271	88	B1-U0-G2	6371	90	B3-U0-G3
TR10-55W48LED4K-G2	48	350	53	5024	95	B1-U0-G1	5103	96	B1-U0-G1	5181	98	B1-U0-G2	5264	99	B3-U0-G3
TR10-80W48LED4K-G2	48	530	80	7188	90	B1-U0-G1	7301	91	B1-U0-G2	7411	93	B1-U0-G2	7530	94	B3-U0-G3

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 of similar. But not identical luminaires.

#### LED Wattage and Lumen Values: for TR10 with Globe

			Average		LE2A			LE3A			LE4A	
Ordering Code: Globe (3000K)	Total LEDs	LED current (mA)	System Wattage <sup>1</sup> (W)	Lumen Output <sup>2</sup>	Efficacy (LPW)	BUG Rating	Lumen Output²	Efficacy (LPW)	BUG Rating	Lumen Output <sup>2</sup>	Efficacy (LPW)	BUG Rating
TR10-35W32LED3K-G2	32	350	37	3015	81	B1-U2-G1	3069	83	B1-U2-G1	3124	84	B1-U2-G1
TR10-55W32LED3K-G2	32	530	55	4337	79	B1-U2-G1	4413	80	B1-U2-G1	4493	82	B1-U2-G2
TR10-72W32LED3K-G2	32	700	71	5460	77	B1-U3-G1	5555	78	B1-U3-G2	5657	80	B1-U2-G2
TR10-55W48LED3K-G2	48	350	53	4452	84	B1-U3-G1	4507	85	B1-U3-G1	4552	86	B1-U2-G2
TR10-80W48LED3K-G2	48	530	80	6369	80	B1-U3-G1	6448	81	B1-U3-G2	6513	81	B1-U3-G2

			Average	LE2A				LE3A		LE4A			
Ordering Code: Globe (4000K)	Total LEDs	LED current (mA)	System Wattage <sup>1</sup> (W)	Lumen Output <sup>2</sup>	Efficacy (LPW)	BUG Rating	Lumen Output <sup>2</sup>	Efficacy (LPW)	BUG Rating	Lumen Output <sup>2</sup>	Efficacy (LPW)	BUG Rating	
TR10-35W32LED4K-G2	32	350	37	3308	89	B1-U2-G1	3365	91	B1-U2-G1	3428	93	B1-U2-G1	
TR10-55W32LED4K-G2	32	530	55	4758	87	B1-U3-G1	4768	87	B1-U2-G1	4929	90	B1-U2-G2	
TR10-72W32LED4K-G2	32	700	71	5990	84	B1-U3-G1	6002	85	B1-U3-G2	6206	87	B1-U3-G2	
TR10-55W48LED4K-G2	48	350	53	4884	92	B1-U3-G1	4869	92	B1-U3-G1	4994	94	B1-U2-G2	
TR10-80W48LED4K-G2	48	530	80	6987	87	B1-U3-G1	6966	87	B1-U3-G2	7145	89	B1-U3-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.

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## **Urban Luminaire**

#### **Specifications**

#### Housing

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

Hood: Cast 356 aluminum dome, mechanically assembled on the luminaire.

Guard: With 2 cast aluminum 356 arms. this guard is welded to the fitter and to the access mechanism.

Skirt: Spun 1100-0 aluminum, mechanically assembled on the luminaire.

#### **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.

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.

### Urban Luminaire

#### **Specifications** (continued)

#### **Luminaire options**



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



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

#### 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.

#### 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.

#### 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.

#### **Quality control**

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 Consortium qualified.

#### **LED Performance**

Predicted lumen depreciation data <sup>1</sup>											
Ambient Temperature (°C)	Driver mA	Calculated L <sub>70</sub> hours <sup>1,2</sup>	L <sub>70</sub> per TM-21 <sup>2,3</sup>	Lumen Maintenance % @ 60,000 hours							
25°C	700 mA	>100,000	>60,000	86%							

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.

<sup>2.</sup>  $L_{70}$  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.

## **Urban Luminaire**

#### Poles

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0.6

TR10

Pole: AM6-BA

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

