

Urban

Transit

TR20 Pendant



The versatility and character of Lumec **Transit** LED 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:
Notes:	

Ordering guide

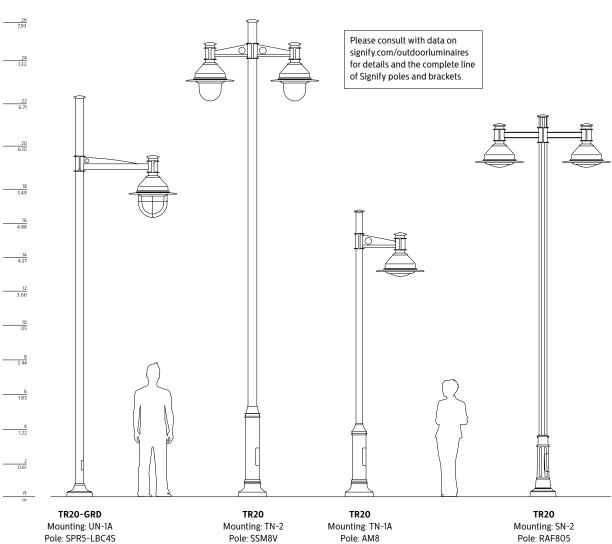
example: TR20-80W48LED4K-G3-ACDR-LE3A-120-DMG-GRD-GN6TX

Series	LED module	Gen.	Globe	Optical system	Voltage	Driver options	Luminaire options	Poles/Brackets	Finish				
TR20		G3											
TR20	3000К	G3	ACDR	LE2A ²	120	AST ³	GRD	Consult with	Textured				
	35W32LED3K ¹ 55W32LED3K ¹ 55W48LED3K 72W32LED3K 80W48LED3K	Gen3	Acrylic Globe	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	208 240 277 347 480	Pre-set driver for progressive start-up CDMGE25 ³ 8 hrs. 25% reduction CDMGE50 ³ 8 hrs. 50% reduction CDMGE75 ³ 8 hrs. 75% reduction	Decorative Guard HS House Side Shield SP2 20kV/20kA Surge Protector (optional) RCD7 ^{4,5} Receptacle 7 pin	signify.com/ outdoorluminaires for details and the complete line of Signify poles and brackets.	BEZTX Midnight Blue BE6TX Ocean Blue BE8TX Royal Blue BG2TX Sandstone				
	35W32LED4K ¹ 55W32LED4K ¹ 55W48LED4K 72W32LED4K 80W48LED4K		_	LE2S Type II (ASYM) w/sag glass lens LE3F Type III (ASYM) w/flat glass lens		CDMGM25 ³ 6 hrs. 25% reduction CDMGM50 ³ 6 hrs. 50% reduction CDMGM75 ³ 6 hrs. 75% reduction	WC without cupola		BKTX Black BRTX Bronze GN4TX				
				LE3S Type III (ASYM) w/sag glass lens LE4F		CDMGS25 ³ 4 hrs. 25% reduction CDMGS50 ³ 4 hrs. 50% reduction			Blue Green GN6TX Forest Green GN8TX Dark Forest Green				
				Type IV (ASYM) w/flat glass lens LE4S Type IV (ASYM)		CDMGS75 ³ 4 hrs. 75% reduction CDMGP ³ Dimming level			GNTX Green GY3TX				
								w/sag glass lens LE5F³ Type V (SYMM) w/flat glass lens LE5S³ Type V (SYMM) w/sag glass lens		determined by the user CLO ³ Pre-set driver to manage lumen depreciation DMG 0-10V OTL ³			Medium Grey RD2TX Burgundy RD4TX Scarlet WHTX White
				200 Brazz (C.12		Pre-set driver to signal end of life of the lamp SRD¹ Sensor ready driver, standard configuration SRD¹ Sensor ready driver, alternate configuration			Other GR Gray Sandtex NP Natural Aluminum TG Hammertone Gold				

- 1. Not available 347-480 volt.
- 2. Globe Material ACDR is required with this optical system.
- 3. Not available with HS option.
- 4. Use of photoelectric cell or shorting cap is required to ensure proper illumination.
- 5. The RCD7 is located on top of the roof in place of the cupola for use with a control node.

Urban Luminaire Dimensions 16" L.C. (406 mm) 16" L.C. (406 mm) 16" L.C. (406 mm) 43 ¹/2" (1105 mm) 245/8" 233/4" (625 mm) (602 mm) TR20 TR20 TR20 (shown w/globe & SN bracket) (shown w/globe, GRD option & TN bracket) (shown w/sag lens & UN bracket) EPA: 2.70 sq.ft. Weight: 51 lbs. (23.1 kg) EPA: 2.38 sq.ft. Weight: 46 lbs. (20.9 kg) EPA: 4.20 sq.ft. Weight: 53 lbs. (24.0 kg)

Poles



Urban Luminaire

LED Wattage and Lumen Values: for TR20 with Flat lens

			Average							LE2F			LE3F			LE4F			LE5F	
Ordering Code: Flat lens	Total LEDs	LED current (mA)	nt Temp	t Temp	Temp	System Wattage (W)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)											
35W32LED3K-G3-x	32	350	3000	37	4781	B1-U0-G1	129	4689	B1-U0-G1	127	4682	B1-U0-G1	127	4500	B3-U0-G1	122				
55W32LED3K-G3-x	32	530	3000	54	6858	B2-U0-G1	127	6726	B1-U0-G1	125	6716	B1-U0-G2	124	6454	B3-U0-G1	120				
72W32LED3K-G3-x	32	700	3000	73	8649	B2-U0-G1	118	8483	B2-U0-G2	116	8470	B2-U0-G2	116	8140	B3-U0-G2	112				
55W48LED3K-G3-x	48	350	3000	54	7172	B2-U0-G1	133	7034	B1-U0-G1	130	7023	B1-U0-G2	130	6749	B3-U0-G1	125				
80W48LED3K-G3-x	48	530	3000	80	10287	B2-U0-G2	129	10090	B2-U0-G2	126	10074	B2-U0-G2	126	9681	B4-U0-G2	121				
35W32LED4K-G3-x	32	350	4000	37	5020	B1-U0-G1	136	4924	B1-U0-G1	133	4916	B1-U0-G1	133	4724	B3-U0-G1	128				
55W32LED4K-G3-x	32	530	4000	54	7201	B2-U0-G1	133	7063	B1-U0-G1	131	7052	B1-U0-G2	131	6777	B3-U0-G1	126				
72W32LED4K-G3-x	32	700	4000	73	9081	B2-U0-G1	124	8907	B1-U0-G2	122	8894	B1-U0-G2	122	8547	B3-U0-G2	117				
55W48LED4K-G3-x	48	350	4000	54	7530	B2-U0-G1	139	7386	B2-U0-G2	137	7375	B2-U0-G2	137	7087	B3-U0-G2	131				
80W48LED4K-G3-x	48	530	4000	80	10801	B2-U0-G2	135	10594	B2-U0-G2	132	10578	B2-U0-G2	132	10165	B4-U0-G2	127				

LED Wattage and Lumen Values: for TR20 with Sag lens

			Average								LE3S			LE4S			LE5S		
Ordering Code: Sag lens	Total LEDs	l current Temp	Color Temp (K)	System Wattage (W)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)												
35W32LED3K-G3-x	32	350	3000	37	4808	B1-U0-G1	130	4688	B1-U0-G1	127	4681	B1-U0-G1	127	4541	B3-U0-G1	123			
55W32LED3K-G3-x	32	530	3000	54	6896	B2-U0-G1	128	6725	B1-U0-G2	125	6715	B1-U0-G2	124	6513	B3-U0-G2	121			
72W32LED3K-G3-x	32	700	3000	73	8698	B2-U0-G2	119	8481	B2-U0-G2	116	8468	B2-U0-G2	116	8214	B3-U0-G2	113			
55W48LED3K-G3-x	48	350	3000	54	7212	B2-U0-G1	134	7032	B1-U0-G2	130	7022	B1-U0-G2	130	6811	B3-U0-G2	126			
80W48LED3K-G3-x	48	530	3000	80	10345	B2-U0-G2	129	10087	B2-U0-G2	126	10072	B2-U0-G2	126	9770	B4-U0-G2	122			
35W32LED4K-G3-x	32	350	4000	37	5048	B1-U0-G1	136	4923	B1-U0-G1	133	4915	B1-U0-G1	133	4768	B3-U0-G1	129			
55W32LED4K-G3-x	32	530	4000	54	7241	B2-U0-G1	134	7061	B1-U0-G2	131	7050	B1-U0-G2	131	6839	B3-U0-G2	127			
72W32LED4K-G3-x	32	700	4000	73	9133	B2-U0-G1	125	8905	B1-U0-G2	122	8892	B1-U0-G2	122	8625	B3-U0-G2	118			
55W48LED4K-G3-x	48	350	4000	54	7572	B2-U0-G2	140	7384	B2-U0-G2	137	7373	B2-U0-G2	137	7152	B4-U0-G2	132			
80W48LED4K-G3-x	48	530	4000	80	10862	B2-U0-G2	136	10591	B2-U0-G2	132	10575	B2-U0-G2	132	10258	B4-U0-G2	128			

LED Wattage and Lumen Values: for TR20 with Prism globe

						Average		LE2A			LE3A			LE4A			LE5A	
Ordering Code: Prism globe (3000K)	Total LEDs	current (mA)	Color Temp (K)	System Wattage (W)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)											
35W32LED3K-G3-x	32	350	3000	37	4895	B1-U3-G1	132	4679	B1-U3-G1	126	4655	B1-U3-G1	126	4120	B3-U1-G3	111		
55W32LED3K-G3-x	32	530	3000	54	7021	B2-U3-G2	130	6711	B1-U3-G2	124	6677	B1-U3-G2	124	5911	B3-U2-G3	107		
72W32LED3K-G3-x	32	700	3000	73	8855	B2-U3-G2	121	8464	B2-U3-G2	116	8420	B2-U3-G2	115	7454	B3-U2-G3	105		
55W48LED3K-G3-x	48	350	3000	54	7342	B2-U3-G2	136	7018	B1-U3-G2	130	6982	B1-U3-G2	129	6181	B3-U2-G3	117		
80W48LED3K-G3-x	48	530	3000	80	10532	B3-U3-G3	132	10066	B2-U3-G2	126	10015	B2-U3-G2	125	8866	B3-U2-G3	111		
35W32LED4K-G3-x	32	350	4000	37	5140	B2-U3-G2	139	4913	B1-U3-G1	133	4887	B1-U3-G2	132	4326	B3-U1-G3	117		
55W32LED4K-G3-x	32	530	4000	54	7372	B2-U3-G2	137	7046	B1-U3-G2	130	7010	B1-U3-G2	130	6207	B3-U2-G3	113		
55W48LED4K-G3-x	48	350	4000	54	9298	B2-U3-G2	172	8887	B2-U3-G2	165	8841	B2-U3-G2	164	7827	B3-U2-G3	110		
72W32LED4K-G3-x	32	700	4000	73	7709	B2-U3-G2	106	7369	B2-U3-G2	101	7331	B1-U3-G2	100	6490	B3-U2-G3	122		
80W48LED4K-G3-x	48	530	4000	80	11058	B3-U3-G3	138	10570	B2-U3-G2	132	10516	B2-U3-G2	131	9309	B4-U2-G4	116		

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

Specifications

Housing

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

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

LE2A - Type II (ASYM) with globe (ACDR) LE3A - Type III (ASYM) with globe (ACDR)

onto the lower part of the heat sink.

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 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.

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.

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.

* Contact factory for DALI options.

Order	Dimming									
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.

Luminaire options



Decorative guard



20kV/20kA integral surge protector (optional)

Urban Luminaire

Specifications (continued)

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 51 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 ¹											
Ambient Calculated Lumen Maintenance % Temperature (°C) Driver mA L ₇₀ hours ^{1,2} L ₇₀ per TM-21 ^{2,3} @ 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. 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.



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