### Roadway



### RoadScape

with ComfortEdge technology







Lumec RoadScape LED Architectural Roadway luminairess featuring ComfortEdge technology that provides a unique and lower perceived glare comfort lighting solution. Connectable ready, the RoadScape offers multiple lumen packages, a complete array of optical distributions ensuring the right fit for any type of application. This family also includes Service Tag, which enables data delivery and information sharing and provides assistance throughout the life of the product.

Project:	
Location:	
Cat.No:	
Туре:	
Lumens:	Qty:
Notes:	

#### Ordering guide

example: S-RSCF-C-135WLED-740-G1-2-UNV-DMG-PH8-TLRD7-GY3

	LED module		Gen.	Distribution	Voltage	Options				
Series		CCT/CRI				Cont	rols <sup>4</sup>	Options		Finish
S-RSCF-C RoadScape S-RSCT-C RoadScape with dome roof	15WLED 1-2 25WLED 2 35WLED 50WLED 60WLED 75WLED 115WLED 135WLED 155WLED	740 4000K/70CRI 730 3000K/70CRI 727° 2700K/70CRI 840° 4000K/80CRI 830° 3000K/80CRI 827° 2700K/80CRI	<b>G1</b> Gen 1	2 Type II 3 Type III 4 Type IV 5 Type V	UNV 120-277V HVU 347-480V	DALI <sup>1</sup>	Zhaga-D4i certified Digitally addressable lighting interface 0-10V Sensor ready driver	API FAWS <sup>2</sup> OMS <sup>7</sup> PH8 <sup>1,8</sup> PH8/347 <sup>8,9</sup> PH8/480 <sup>8,9</sup> PHXL <sup>1,8</sup> PH9 <sup>8</sup> TLRD7 <sup>10</sup> SP2 SP1X SP2X TLRSR <sup>5,11</sup> BAC <sup>12</sup>	Factory installed NEMA label, ANSI C136.15-2020 compliant Field adjustable wattage switch Outdoor Multi-Sensor Twist-lock photoelectric cell, UNV (120-277VAC) Twist-lock photoelectric cell (347VAC) Twist-lock photoelectric cell (480VAC) UNV (120-277VAC) Shorting cap Tool less receptacle for twist-lock photocell or shorting cap, 7-pin (standard) 20kV / 10kA Surge protector Fail-Off 10kV/5kA Surge protector Fail-Off 20kV/10kA Surge protector SR receptacle Meets the requirements of the Buy American Act of 1933 (BAA)	BK Black BR Bronze GY3 Gray WH White Textured Finishes BKTX Black BRTX Bronze GY3TX Gray WHTX White

- 1. Not available with HVU Voltage option.
- $2. \ \, {\rm Only\ available\ with\ DMG\ Driver\ option}.$
- 3. Extended lead-time may apply. Consult factory.
- 4. Select either D4I, DALI or DMG or SRD mandatory option.
- 5. TLRSR must be selected with D4I Driver option.
- 6. Please note this integrated feature come standard with RoadScape
- 7. TLRSR Option and D4I Driver option must be selected with OMS.
- 8. TLRD7 must be selected for this option.
- 9. Not available with UNV Voltage option.
- $10. \, \mathsf{Use} \, \, \mathsf{of} \, \, \mathsf{photoelectric} \, \, \mathsf{cell} \, \, \mathsf{or} \, \, \mathsf{shorting} \, \, \mathsf{cap} \, \, \mathsf{is} \, \, \mathsf{required} \, \, \mathsf{to} \, \, \mathsf{ensure} \, \, \mathsf{proper} \, \mathsf{illumination}$
- 11. Only available with D4i or SRD Driver options.
- 12. Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.







## LED Architectural Roadway with ComfortEdge technology

#### **Predicted Lumen Depreciation Data**

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. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-21.

Ambient Temperature	L <sub>70</sub> per TM-21	50,000hrs	75,000hrs	100,000hrs
25°C	>102,000 hrs	90.7%	86.4%	82.2%



### **Connected lighting**

Interact City connector node provides the plug and play wireless communications technology to connect your street light to the Interact City lighting management system.

Accessory Ordering Code	Description
LLC	Interact City cellular technology connector node

Contact the factory for additional support when connected  $% \left( x\right) =\left( x\right) +\left( x\right) +$ lighting or additional services are desired.

#### **Wattage Values**

Ordering Code	Avg. System Watts (W) <sup>1</sup>	Wattage Label <sup>2</sup>
S-RSCx-C-15WLED	35	30
S-RSCx-C-25WLED	59	60
S-RSCx-C-35WLED	14	10
S-RSCx-C-50WLED	19	20
S-RSCx-C-60WLED	27	30
S-RSCx-C-75WLED	34	30
S-RSCx-C-105WLED	44	40
S-RSCx-C-115WLED	63	60
S-RSCx-C-135WLED	79	80
S-RSCx-C-155WLED	89	90

#### **FAWS**

15WLED 25WLED 35WLED 50WLED 60WLED 75WLED 105WLED

FAWS	Typical System Wattage Multiplier	Typical Delivered Lumens Multiplier
1	0.295	0.316
2	0.485	0.511
3	0.565	0.585
4	0.607	0.641
5	0.710	0.718
6	0.764	0.772
7	0.820	0.828
8	0.863	0.867
9	0.907	0.905
10	1.000	1.000

Note: Typical value accuracy +/- 5%

115WLED 135WLED 155WLED

FAWS	Typical System Wattage Multiplier	Typical Delivered Lumens Multiplier
1	0.160	0.128
2	0.278	0.272
3	0.334	0.336
4	0.423	0.432
5	0.479	0.492
6	0.544	0.559
7	0.604	0.619
8	0.666	0.683
9	0.731	0.749
10	1.000	1.000

Note: Typical value accuracy +/- 5%

Typical values, rounded.
 As per ANSI C136.15-2020. Consult factory for other labelling needs.

## LED Architectural Roadway with ComfortEdge technology

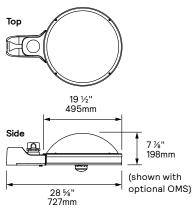
#### ComfortEdge: LED Standard Performance Lumen Values

		Type 2			Туре 3			Type 4			Type 5		
Ordering Code	Lumen Output	BUG Rating	Efficacy (LPW)										
4000K / 70CRI													
S-RSCx-C-15WLED	2107	B1-U0-G1	146	1994	B1-U0-G1	138	2194	B1-U0-G1	152	1789	B1-U0-G1	125	
S-RSCx-C-25WLED	3557	B1-U0-G2	146	3367	B2-U0-G2	138	3704	B1-U0-G2	152	3039	B2-U0-G1	126	
S-RSCx-C-35WLED	4916	B2-U0-G2	143	4653	B2-U0-G2	135	5119	B2-U0-G2	149	4203	B3-U0-G2	122	
S-RSCx-C-50WLED	6751	B2-U0-G3	139	6389	B2-U0-G2	132	7029	B2-U0-G2	145	5902	B3-U0-G2	123	
S-RSCx-C-60WLED	8309	B3-U0-G3	140	7864	B3-U0-G3	132	8652	B3-U0-G3	146	7388	B3-U0-G3	124	
S-RSCx-C-75WLED	10189	B3-U0-G3	137	9643	B3-U0-G3	129	10610	B3-U0-G3	142	8949	B3-U0-G3	120	
S-RSCx-C-105WLED	13421	B3-U0-G3	129	12702	B3-U0-G3	122	13975	B3-U0-G3	134	12276	B4-U0-G3	120	
S-RSCx-C-115WLED	14265	B3-U0-G3	125	13501	B3-U0-G3	118	14854	B3-U0-G3	130	12892	B4-U0-G3	113	
S-RSCx-C-135WLED	16260	B3-U0-G4	121	15389	B3-U0-G3	115	16931	B3-U0-G4	126	14997	B4-U0-G3	111	
S-RSCx-C-155WLED	17982	B3-U0-G4	116	17019	B4-U0-G4	110	18724	B3-U0-G4	121	16609	B4-U0-G4	108	
3000K / 70CRI													
S-RSCx-C-15WLED	2039	B1-U0-G1	141	1930	B1-U0-G1	134	2123	B1-U0-G1	147	1731	B1-U0-G1	121	
S-RSCx-C-25WLED	3442	B1-U0-G2	141	3258	B1-U0-G1	134	3584	B1-U0-G2	147	2941	B2-U0-G1	122	
S-RSCx-C-35WLED	4757	B2-U0-G2	138	4502	B2-U0-G2	131	4953	B2-U0-G2	144	4067	B3-U0-G2	118	
S-RSCx-C-50WLED	6532	B2-U0-G2	135	6182	B2-U0-G2	127	6802	B2-U0-G2	140	5711	B3-U0-G2	119	
S-RSCx-C-60WLED	8040	B3-U0-G3	135	7610	B3-U0-G3	128	8372	B3-U0-G3	141	7149	B3-U0-G2	120	
S-RSCx-C-75WLED	9859	B3-U0-G3	132	9331	B3-U0-G3	125	10266	B3-U0-G3	138	8659	B3-U0-G3	116	
S-RSCx-C-105WLED	12986	B3-U0-G3	125	12291	B3-U0-G3	118	13522	B3-U0-G3	130	11878	B4-U0-G3	116	
S-RSCx-C-115WLED	13803	B3-U0-G3	121	13064	B3-U0-G3	114	14373	B3-U0-G3	126	12475	B4-U0-G3	109	
S-RSCx-C-135WLED	15733	B3-U0-G4	117	14890	B3-U0-G3	111	16382	B3-U0-G3	122	14511	B4-U0-G3	107	
S-RSCx-C-155WLED	17400	B3-U0-G4	113	16468	B3-U0-G3	107	18118	B3-U0-G4	117	16071	B4-U0-G3	104	
2700K / 70CRI													
S-RSCx-C-15WLED	1898	B1-U0-G1	132	1796	B1-U0-G1	125	1976	B1-U0-G1	137	1611	B1-U0-G1	113	
S-RSCx-C-25WLED	3204	B1-U0-G2	132	3033	B1-U0-G1	124	3336	B1-U0-G2	137	2738	B2-U0-G1	114	
S-RSCx-C-35WLED	4428	B2-U0-G2	129	4191	B2-U0-G2	122	4611	B2-U0-G2	134	3786	B2-U0-G2	110	
S-RSCx-C-50WLED	6081	B2-U0-G2	125	5755	B2-U0-G2	119	6332	B2-U0-G2	131	5316	B3-U0-G2	111	
S-RSCx-C-60WLED	7485	B3-U0-G3	126	7084	B3-U0-G3	119	7794	B2-U0-G3	131	6655	B3-U0-G2	112	
S-RSCx-C-75WLED	9178	B3-U0-G3	123	8686	B3-U0-G3	117	9557	B3-U0-G3	128	8061	B3-U0-G3	108	
S-RSCx-C-105WLED	12089	B3-U0-G3	116	11442	B3-U0-G3	110	12588	B3-U0-G3	121	11058	B4-U0-G3	108	
S-RSCx-C-115WLED	12849	B3-U0-G3	112	12161	B3-U0-G3	106	13380	B3-U0-G3	117	11613	B4-U0-G3	101	
S-RSCx-C-135WLED	14646	B3-U0-G3	109	13862	B3-U0-G3	103	15250	B3-U0-G3	114	13509	B4-U0-G3	100	
S-RSCx-C-155WLED	16198	B3-U0-G4	105	15330	B3-U0-G3	99	16866	B3-U0-G4	109	14961	B4-U0-G3	97	

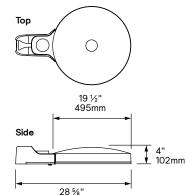
Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at signify.com/outdoorluminaires. Consult DLC QPL to confirm your specific fixture selection is DLC approved. Note: Some data may be scaled based on tests of similar but not identical luminaries.

## LED Architectural Roadway with ComfortEdge technology

#### **Dimensions**



Dome roof Weight: 30 lbs EPA: 0.91 sq. feet



Flat roof
Weight: 27 lbs
EPA: 0.46 sq. feet



#### **Specifications**

#### Housing

In a round shape, this housing is made of injection die cast A360.1 aluminium alloy 0.1 (2.5mm) minimum thickness, mechanically assembled to the adaptor. Offers a tool free access to electrical components, rated IP66.

#### Adaptor

Made of cast 356 aluminium, fits on a 1.66" (42mm) O.D. (1.25" NPS), 1.9" (48mm) O.D. (1.5" NPS) or 2 3/8" (60mm) O.D. (2" NPS) by 4 1/4" (108mm) minimum long tenon. Comes with a zinc plated clamp fixed by 2 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/5° tilt in 2.5° increments. Includes integral bubble level standard (always included). C/w a secured removable door to prevent accidental dropping and giving a tool-free access to the terminal block. Rated IP54 per ANSI C136.37. Complete with a bird guard protecting against birds and similar intruders and an ANSI label as per C136.15 2020 to identify wattage and source (both included in box).

### **Light Engine**

Composed of 4 main components: LED Module / Optical System / Heat Sink / Driver.

Heat Sink/Light Engine: Light guide technology provides low-glare, uniform illumination. Composed of 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. Entire luminaire is rated for operation in ambient temps of -40°C / -40°F up to +40°C / +104°F.

LED Module: Composed of high-performance white LEDs. Color temperature as per ANSI/ NEMA bin 2700 Kelvin nominal (2725 ±145K), 3000 Kelvin nominal (3045K +/- 175K) or 4000 Kelvin nominal (3985K +/- 275K), CRI 70 Min. 75 Typical. Other CCT/ CRI also available. consult factory.

Optical System: High power factor of 90% min. electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from UNV: 120 to 277 or HVU: 347 to 480 or HVX: 277 to 480 VAC rated for both application line to line or line to neutral, THD of 20% max. 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 6kV (min). Driver: High power factor of 90% min. electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from UNV: 120 to 277 or HVU: 347 to 480 or HVX: 277 to 480 VAC rated for both application line to line or line to neutral. THD of 20% max. 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 6kV (min).

#### Integrated Features

DMG: Dimmable driver 0-10V.

Surge Protection: Fail-On Surge protection device 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 DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA.

**Note:** These integrated features always come with RoadScape luminaire.

#### Driver and Luminaire Options

**UNV**: Universal voltage range (120-277VAC) **HVU**: High voltage range (347-480VAC)

D4I\*: Zhaga-D4i certified fixture

DALI\*: DALI D4i certified driver

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 and bottom TLRSR receptacle, if this option included/chosen. This configuration is compatible with Interact City controllers.

OMS: Outdoor Multi Sensor

**NRC:** No Receptacle. Fixture is shipped with a cap instead of a receptacle.

SP2: Fail-On 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

<sup>\*</sup> These driver options ship with DALI bus power turned on and luminaire information loaded in Memory banks 1 as per ANSI C137.4 (2021). Consult factory for any other driver programming requirement.

### LED Architectural Roadway with ComfortEdge technology

#### Specifications (continued)

#### **Driver and Luminaire Options** (continued)

SP1X: Fail-Off Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/ IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/5kA.

SP2X: Fail-Off 20kV / 10kA surge protection device that provides extra protection beyond the SP1X 10kV/5kA level.

FAWS: Field Adjustable Wattage Selector, pre-set to the highest position, can be easily switched in the field to the required position. This reduces total luminaire wattage consumption and reduces the light level - see the FAWS multiplier chart for more details.

Note: It is not recommended to use FAWS with other dimming or controls; if you do, set the switch to position 10 (maximum output) to enable the other dimming or controls. Switching FAWS to any position other than 10 will disable other dimming or controls.

TLRD7: Tool less orientable receptacle with 7 pins enabling dimming and additional functionality (to be determined), can be used with a twist lock Interact City node or photoelectric cell or a shorting cap Use of photoelectric cell or shorting cap is required to ensure proper illumination. Note: Additional hardware will be required to utilize the additional 2 pins on this recentacle

TLRSR: SR Sensor connector, installed in fixture door. Shipped with protective cover.

PH8: Twist-lock photoelectric cell, UNV (120-277VAC).

PHXL: Twist-lock photoelectric cell, extended life, UNV (120-277VAC).

PH9: Shorting cap (use of photoelectric cell or shorting cap is required to ensure proper illumination).

API: Factory Installed NEMA label, ANSI C136.15-2020 compliant. Consult factory for other labeling needs.

#### Connected Lighting

Interact City connector node provides the plug and play wireless communications technology to connect your street light to the Interact City lighting management system. With Interact you can remotely manage, monitor and control all city lighting, from

roads and streets, to parks and plazas, and bridges from one single system. Connected lighting enables capabilities including, accurate on/off switching, dimming control, fault reporting and integration with other systems to enable condition-based lighting. Interact provides you with a robust and scalable infrastructure to further reduce energy consumption, improve operations, and turn lighting into a connected network for your smart city journey. For more details visit: interact-lighting.com/en-us/

what-is-possible/interact-city

#### 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, System Reliability Tool, Advance data and LED manufacturer LM-80/TM-21 data, 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. Wiring the connection of the luminaire is done using a terminal block connector 600V, 85A for use with #2 14 AWG. wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a 10Amp time-delay fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

#### Hardware

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

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 5000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

#### 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.

#### **Vibration Resistance**

The S-RSC meets the ANSI C136.31-2018, American National Standard for Roadway Luminaire Vibration specs for Bridge/overpass applications.

#### Certifications and Compliance

cULus Listed for Canada and USA. Luminaire meets DOE and MSSLC Model Specification for LED Roadway Luminaires. Most versions of RoadFocus LED luminaires are DesignLights Consortium qualified, consult DLC QPL to confirm your specific fixture selection is approved. CCTs 3000K and warmer are IDA Dark Sky Approved. Luminaire complies with or exceeds the following ANSI C136 standards: .2. .3. .10. .14. .15. .22. .25. .31. .37. .41.

#### Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product.

For more details visit: signify.com/servicetag

#### **Limited Warranty**

10-year limited warranty. See signify.com/warranties for details and restrictions.

For brackets / arms available with this luminaire, see Lumec 3D for details.

<sup>\*</sup> These driver options ship with DALI bus power turned on and luminaire information loaded in Memory banks 1 as per ANSI C137.4 (2021). Consult factory for any other driver programming requirement.