



The **MetroScape LED pendant** luminaire combines style and performance to create flexible, durable and attractive energy-saving solutions that blend in well with traditional-styled urban architecture. Now available with comfort optics, it provides reduced glare for an enhanced user experience. Includes Service Tag, Philips innovative way to provide assistance throughout the life of the product.

Project: \_\_\_\_\_

Location: \_\_\_\_\_

Cat.No: \_\_\_\_\_

Type: \_\_\_\_\_

Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_

Notes: \_\_\_\_\_

### Luminaire ordering guide

Example: MSR-C-140L450WW-G1-1-UNV-DMG-SMA-RCD-BKTX

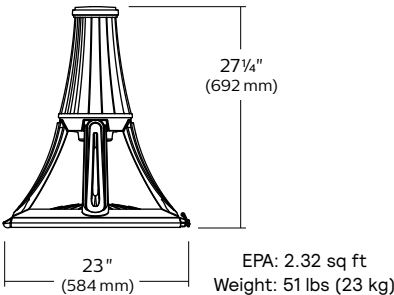
Series	LED module	Gen.	Optical System	Voltage	Driver <sup>3</sup>	Adapter	Luminaire options	Mountings and poles	Finishes
<b>MSR-C</b> MetroScape LED pendant luminaire  <b>MSRC-C</b> MetroScape LED pendant luminaire	<b>3000K</b>	G1 Gen1	<b>1</b> Type I (ASYM)  <b>2</b> Type II (ASYM)  <b>3</b> Type III (ASYM)  <b>4</b> Type IV (ASYM)  <b>5</b> Type V (SYMM)	<b>UNV</b> 120-277VAC  <b>347</b> 347VAC  <b>480</b> 480VAC	<b>DMG</b> 0-10V  <b>DALI</b> <sup>1,2,4</sup> DALI compatible  <b>SRD</b> <sup>1</sup> Sensor ready driver (standard configuration)  <b>SRD1</b> <sup>1</sup> Sensor ready driver (alternate configuration)	<b>MA1</b> 1 1/4" NPT threaded hole adapter accepting threaded tube  <b>MA2</b> 1 1/2" NPT threaded hole adapter accepting threaded tube.  <b>SMA</b> Decorative retro side-mounted cast-aluminum, accepts tubes from 1 5/8" to 2 3/8"	<b>BX</b> Bird repellent  <b>DH</b> Opaque decorative hood  <b>PH8</b> <sup>4</sup> Twist-lock Photoelectric Cell  <b>PHXL</b> <sup>2,4</sup> Twist-lock Photoelectric Cell, extended life, UNV (120-277VAC)  <b>PH9</b> <sup>4</sup> Shorting cap  <b>RCD</b> <sup>5</sup> Receptacle for twist-lock photocell or shorting cap, 5-pin (standard)  <b>RCD7</b> <sup>5</sup> Receptacle for twist-lock photocell or shorting cap, 7-pin (optional)  <b>SP2</b> 20kV / 20kA Surge Protector (optional)	Consult the Signify web site and LumeC 3D for details and the complete line of mountings and poles	<b>Textured</b>  <b>BE2TX</b> Midnight Blue <b>BE6TX</b> Ocean Blue <b>BE8TX</b> Royal Blue <b>BG2TX</b> Sandstone <b>BKTX</b> Black <b>BRTX</b> Bronze <b>GN4TX</b> Blue Green <b>GN6TX</b> Forest Green <b>GN8TX</b> Dark Forest Green <b>GNTX</b> Green <b>GY3TX</b> Medium Grey <b>RD2TX</b> Burgundy <b>RD4TX</b> Scarlet <b>WHTX</b> White  <b>Others</b> <b>GR</b> Gray Sandtex <b>NP</b> Natural Aluminum <b>TG</b> Hammer-tone Gold <b>TS</b> Hammer-tone Silver
	<b>140L450WW</b> <sup>1</sup>								
	<b>140L650WW</b> <sup>1</sup>								
	<b>140L1150WW</b>								
	<b>140L1675WW</b>								
	<b>140L2100WW</b>								
	<b>4000K</b>								
	<b>140L450NW</b> <sup>1</sup>								
	<b>140L650NW</b> <sup>1</sup>								
	<b>140L1150NW</b>								
	<b>140L1675NW</b>								
	<b>140L2100NW</b>								

- For 240 or 277 volt with DALI option consult factory.
- Not available with **347V** and **480V**.
- Select either **DMG** or **DALI** mandatory driver options.
- Select either **RCD** or **RCD7** mandatory luminaire options for this option.
- Use of photoelectric cell or shorting cap is required to ensure proper illumination.

# MSR-C MetroScape pendant

urban luminaire with comfort optics

## Dimensions



## LED Wattage and Lumen Values for MSR-C

Ordering Code	Total LEDs	System current (mA)	Average System Watts (W)	Type 1			Type 2			Type 3			Type 4			Type 5		
				Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
MSR-C 3000K																		
140L450WW-G1	140	450	21	2291	108	B1-U0-G1	2296	108	B1-U0-G1	2360	111	B1-U0-G1	2473	116	B1-U0-G1	2261	106	B1-U0-G1
140L650WW-G1	140	650	31	3205	105	B2-U0-G1	3212	105	B1-U0-G1	3302	108	B1-U0-G1	3460	113	B1-U0-G1	3163	104	B2-U0-G1
140L1150WW-G1	140	1150	52	5455	104	B2-U0-G2	5467	104	B2-U0-G2	5619	107	B2-U0-G2	5888	112	B2-U0-G2	5383	103	B3-U0-G1
140L1675WW-G1	140	1675	75	7491	99	B3-U0-G3	7507	100	B3-U0-G3	7717	102	B2-U0-G2	8086	107	B2-U0-G2	7393	98	B3-U0-G2
140L2100WW-G1	140	2100	97	9090	94	B3-U0-G3	9109	94	B3-U0-G3	9363	97	B3-U0-G3	9812	101	B3-U0-G3	8970	93	B3-U0-G2
MSR-C 4000K																		
140L450NW-G1	140	450	21	2296	108	B1-U0-G1	2301	109	B1-U0-G1	2365	112	B1-U0-G1	2478	117	B1-U0-G1	2266	107	B1-U0-G1
140L650NW-G1	140	650	30	3211	105	B2-U0-G1	3218	106	B1-U0-G1	3308	109	B1-U0-G1	3467	114	B1-U0-G1	3169	104	B2-U0-G1
140L1150NW-G1	140	1150	52	5466	105	B2-U0-G2	5478	105	B2-U0-G2	5630	108	B2-U0-G2	5900	113	B2-U0-G2	5394	103	B3-U0-G1
140L1675NW-G1	140	1675	75	7506	100	B3-U0-G3	7522	100	B3-U0-G3	7732	103	B2-U0-G2	8102	108	B2-U0-G2	7408	99	B3-U0-G2
140L2100NW-G1	140	2100	96	9108	95	B3-U0-G3	9128	95	B3-U0-G3	9382	97	B3-U0-G3	9831	102	B3-U0-G3	8988	93	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 [outdoorlighting.applications@Signify.com](mailto:outdoorlighting.applications@Signify.com).  
Note: Some data may be scaled based on tests of similar but not identical luminaires.

## 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	Up to 2100 mA	>100,000 hrs	>60,000 hrs	84%

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<sub>70</sub> is the predicted time when LED performance depreciates to 70% of initial lumen output.  
3. Calculated per IESNA TM21-11. Published L<sub>70</sub> hours limited to 6 times actual LED test hours.

# MSR-C MetroScape pendant

## urban luminaire with comfort optics

### Specifications

#### Cage

In a round shape, this cage is made of four cast aluminum 356 decorative arms welded to the housing and to the access mechanism.

#### Housing

In a round shape, this housing is made of cast 356 aluminum, c/w a watertight grommet, mechanically assembled to the bracket with four bolts 3/8 16 UNC. This suspension system permits for a full rotation of the luminaire in 90° increments. The housing is complete with a watertight access cap mechanically secured with two captive screws, giving access to the driver. Rated IP66.

#### Access-Mechanism

Made of cast aluminum 356 technical, ring with latch and hinge. The mechanism shall offer tool free access to the Light engine.

#### 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 for 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 DALI, driver is class 1.

#### 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. Optional SP2: 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

#### Driver options

**DMG:** Dimmable driver 0-10V.

**DALI:** DALI compatible.

**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.

#### Luminaire options



**PH8** (allows a 90° rotation) Photoelectric Cell, Twist-lock Type complete with receptacle.



**PH9** Shorting cap, Twist-lock Type complete with receptacle.



**PHXL** (allows a 90° rotation) Extended life photoelectric cell, Twist-lock Type complete with receptacle.



**RCD** Receptacle 5-pins allowing dimming, can be used with a twist-lock Starsense, shorting cap or a photoelectric cell.



**RCD7** Receptacle 7-pins.



**BX** Bird repellent.



**DH** Opaque decorative hood.

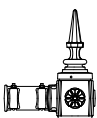
#### Adapters



adapter for existing mounting.



adapter for existing mounting.



**SMA** The luminaire is suspended by means of a decorative side-mounted cast aluminum adapter. This adapter accepts tubes from 1<sup>5</sup>/<sub>8</sub>" to 2<sup>3</sup>/<sub>8</sub>" (41 to 60mm) and is adjustable to more or less 5°. The adapter features a cast aluminum decorative cover and finial.



**SMB** The luminaire is suspended by means of a decorative side-mounted cast aluminum adapter. This adapter accepts tubes from 1<sup>5</sup>/<sub>8</sub>" to 2<sup>3</sup>/<sub>8</sub>" (41 to 60mm) and is adjustable to more or less 5°.

# MSR-C MetroScape pendant

## urban luminaire with comfort optics

### Specifications (continued)

#### Finish

Color to be in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with  $\pm 1$  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 Finishes:

**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 Finishes:

**GR:** Gray Sandtex  
**NP:** Natural Alum.  
**TG:** Hammer-tone Gold  
**TS:** Hammer-tone Silver

#### LED 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.

#### Hardware

All exposed screws shall be stainless steel with Ceramic primer seal basecoat to reduce seizing of the parts. 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 & ISO 14001 2004 International Quality Standards Certification.

#### Vibration Resistance

Meets the ANSI C136.31, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications.

#### Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Signify Service tag application. With a simple scan of a QR code, placed inside the luminaire, 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 right away.

For more details visit: [signify.com/servicetag](https://signify.com/servicetag)

#### Certifications and Compliance

CSA, cULus Listed for Canada and USA.  
Compliant configurations listed on Design Lights Consortium (DLC) qualified products list.

