

OSQ Series

OSQ™ LED Billboard Luminaire featuring featuring Patented NanoComfort™ Technology – Version C

Rev. Date: V4 11/08/2023

Product Description

The OSQ™ billboard luminaire combines high performance, low maintenance and ease of installation in a cost effective package for the outdoor advertising market. Cree Lighting's patented NanoComfort™ Technology provides high illumination and superior uniformity on the board, apron and extensions. Cree's TrueWhite® Technology provides superior color rendering for clarity, vividness and contrast of the billboard image resulting in increased visual impact while saving up to half of the energy of traditional metal halide technology.

Application: Billboards

Performance Summary

Utilizes Patented NanoComfort™ Technology

Utilizes Cree TrueWhite® Technology on 5000K Luminaires

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: Up to 16,000

Efficacy: Up to 165 LPW

CRI: Minimum 70 CRI (5700K); 90 CRI (5000K)

CCT: 5000K, 5700K

Limited Warranty*: 10 years for luminaire/10 years for Colorfast DeltaGuard® finish

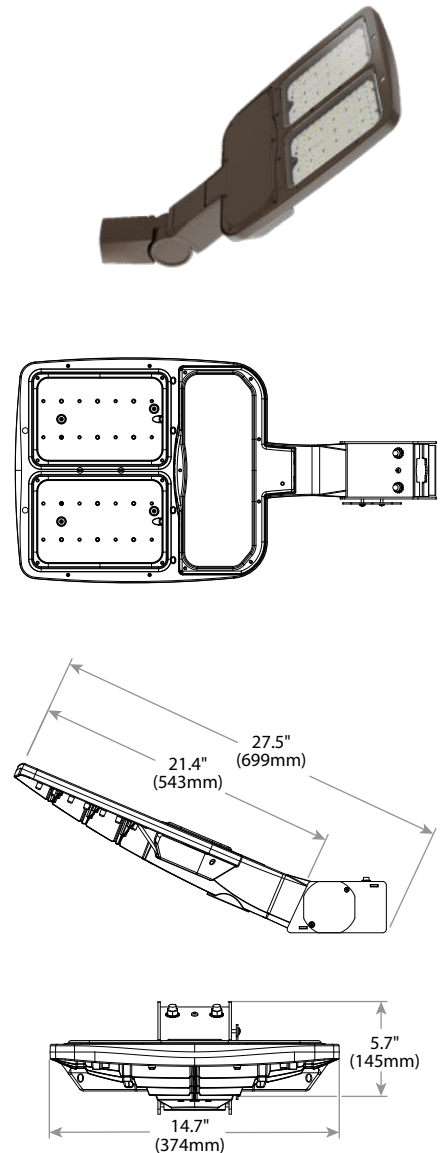
*See <http://creelighting.com/warranty> for warranty terms

Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:
Example: **Mount:** OSQ-F25SV + **Luminaire:** OSQM-C-16L-50K9-75-UL-NM-SV-BB

Mount (Luminaire must be ordered separately)	
OSQ-F25	
OSQ-F25 25" Fixed	Color Options: BK Black BZ Bronze SV Silver WH White

Luminaire (Mount must be ordered separately)									
OSQ	M	C	16L		75	UL	NM		BB
Family	Size	Series	Lumen Package	CCT/CRI	Optic	Voltage	Mount	Color Options	Options
OSQ	M Medium	C	16L 16,000 Lumens	50K9 5000K, 90 CRI 57K7 5700K, 70 CRI	75 NEMA® 7x5	UL Universal 120- 277V	NM No Mount	BK Black BZ Bronze SV Silver WH White	BB Billboard



Weight
26.5 lbs. (12kg)



US: creelighting.com (800) 236-6800

Canada: creelighting-canada.com (800) 473-1234

Product Specifications

CREE LIGHTING NANOCOMFORT™ TECHNOLOGY

Cree Lighting’s NanoComfort™ Technology ends the trade-offs in outdoor lighting by providing superior glare reduction and visual comfort in high-efficiency illumination delivered precisely where it is needed. The basic building block of NanoComfort™ Technology is a compact 4x4 array of LEDs. Each of the 16 LEDs in a module is in contact with its own acrylic polymer lens to capture and precisely direct light. With NanoComfort™ Technology, the acrylic optics are cut and sculpted into facets that relieve the glare and harshness while improving visual comfort – all while retaining superb efficacy and control.

CONSTRUCTION & MATERIALS

- Slim, low profile design minimizes wind load requirements
- Luminaire housing is rugged die cast aluminum with an integral, weathertight LED driver compartment and high performance heat sink
- Acrylic optic w/clear tempered glass lens
- Carbon steel mounting arm is fixed at 25 degrees, and mounts to 1.5" (38mm) square or 1.66" (42mm) O.D. round tubing
- Mounting arm serves as junction box
- Designed for uplight applications only
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Silver, bronze, black, and white are available
- **Weight:** 26.5 lbs. (12kg)

ELECTRICAL SYSTEM

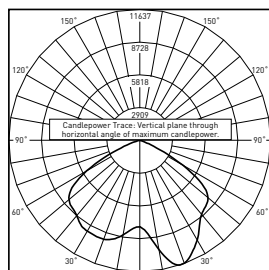
- **Input Voltage:** 120-277V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 10kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breaker should be used

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Drivers and LEDs are UL certified in accordance with UL8750
- OSQ billboard luminaires are enclosure rated IP66 per IEC 60598-1
- Certified to ANSI C136.31-2001, 1.5G normal vibration standards
- ANSI C136.2 10kV surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Lens meets IK07 requirements per IEC 60068-2
- Assembled in the USA by Cree Lighting from US and imported parts
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- DLC and DLC Premium qualified SKUs available. Please refer to <https://qpl.designlights.org/solid-state-lighting> for most current information
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65Warnings.ca.gov

Photometry

All published luminaire photometric testing performed to IES LM-79 standards.



RESTL Test Report #: PL17921-001A
 OSQM-C-16L-40K7-75-UL-xx-xx-xx
 Initial Delivered Lumens: 16,933

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Electrical Data*					
Lumen Package	System Watts 120-277V	Total Current (A)			
		120V	208V	240V	277V
16L	97	0.81	0.47	0.40	0.35

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V +/-10%

OSQ™ LED Billboard Ambient Adjusted Lumen Maintenance ¹					
Ambient	Initial LMF	25K hr Reported ² LMF	50K hr Reported ² LMF	75K hr Reported ² LMF	100K hr Reported ² LMF
5°C (41°F)	1.02	0.99	0.93	0.88	0.83
10°C (50°F)	1.02	0.98	0.93	0.87	0.82
15°C (59°F)	1.01	0.98	0.92	0.87	0.82
20°C (68°F)	1.01	0.97	0.92	0.86	0.81
25°C (77°F)	1.00	0.97	0.91	0.86	0.81

¹ Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.

² In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

³ Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

NEMA® 7x5 Distribution		
Lumen Package	5000K (90CRI)	5700K (70CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*
16L	11,850	16,000

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

