



# OSQ SERIES

LED SPECIFICATION-GRADE AREA LUMINAIRE

Ready to turn your lighting poles into money trees.

**CREE**  TM





**OSQ Series LED Area Luminaire**

# ADVANCING LIGHT THROUGHOUT YOUR SITE.

## EXCEPTIONAL LIGHT QUALITY

Without precise optical control high output lighting can be wasteful, or worse, objectionable to neighboring properties. Utilizing our NanoOptic® Technology, the OSQ Series has the right optics to effectively meet the illumination needs of projects while minimizing waste and spill light.

## ENERGY SAVINGS

The next generation of area lighting surpasses traditional lighting technology with market-leading optical performance and an extensive lifetime, leading to energy savings of up to 80 percent compared to HID.

## INCREASING OPPORTUNITIES

We continue to advance LED lighting solutions that outperform our first generation of luminaires. The OSQ Series High Output can now deliver up to 68,691 lumens — improving our replacement range for applications using multiple 1000W HID.



OSQ Series  
Adjustable Arm Mount



OSQ Series High Output  
Direct Arm Mount

# TECHNOLOGY WITH PROVEN PERFORMANCE.

Cree is the originator of today's LED lighting technology and is 100 percent committed to the continued advancement of solid state lighting. That's why we strive to find ways to continuously improve our products and offer more value to our customers. We know there are a lot of great opportunities to use LED lighting in outdoor applications, and finding the right lighting solution to fit your needs is our business.



## NanoOptic® Technology

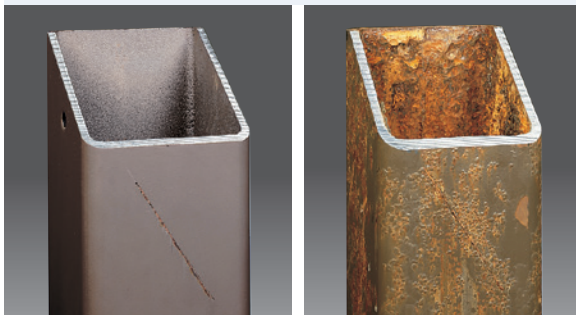
With patented NanoOptic® Technology available in more than 20 distributions, Cree® outdoor LED fixtures provide precise optical control for exceptional application performance and energy savings. The NanoOptic® refractor system offers superior light control with more lumens delivered in the target area, improved uniformity ratios and controlled high-angle brightness.

## Cree TrueWhite® Technology

Available with the OSQ High Output luminaire (5000K): A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics and lifelong color consistency, all while maintaining high luminous efficacy. Colors show truer, spaces are brighter and significant energy savings are real.

## Colorfast DeltaGuard® Finish

### Steel



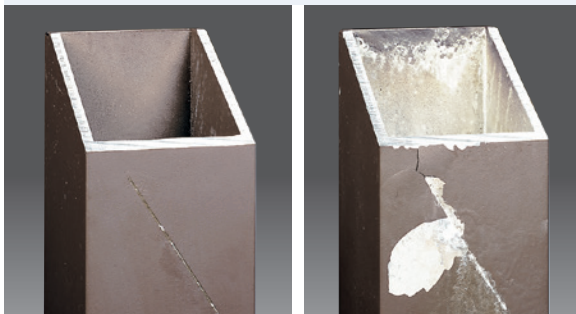
Colorfast DeltaGuard

Typical 5-Stage

### Premium Protection Against the Elements

Our 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. Backed by a 10-year limited finish warranty, the OSQ Series LED area luminaire will look great long after the competition fades away.

### Aluminum



Colorfast DeltaGuard

Typical 5-Stage

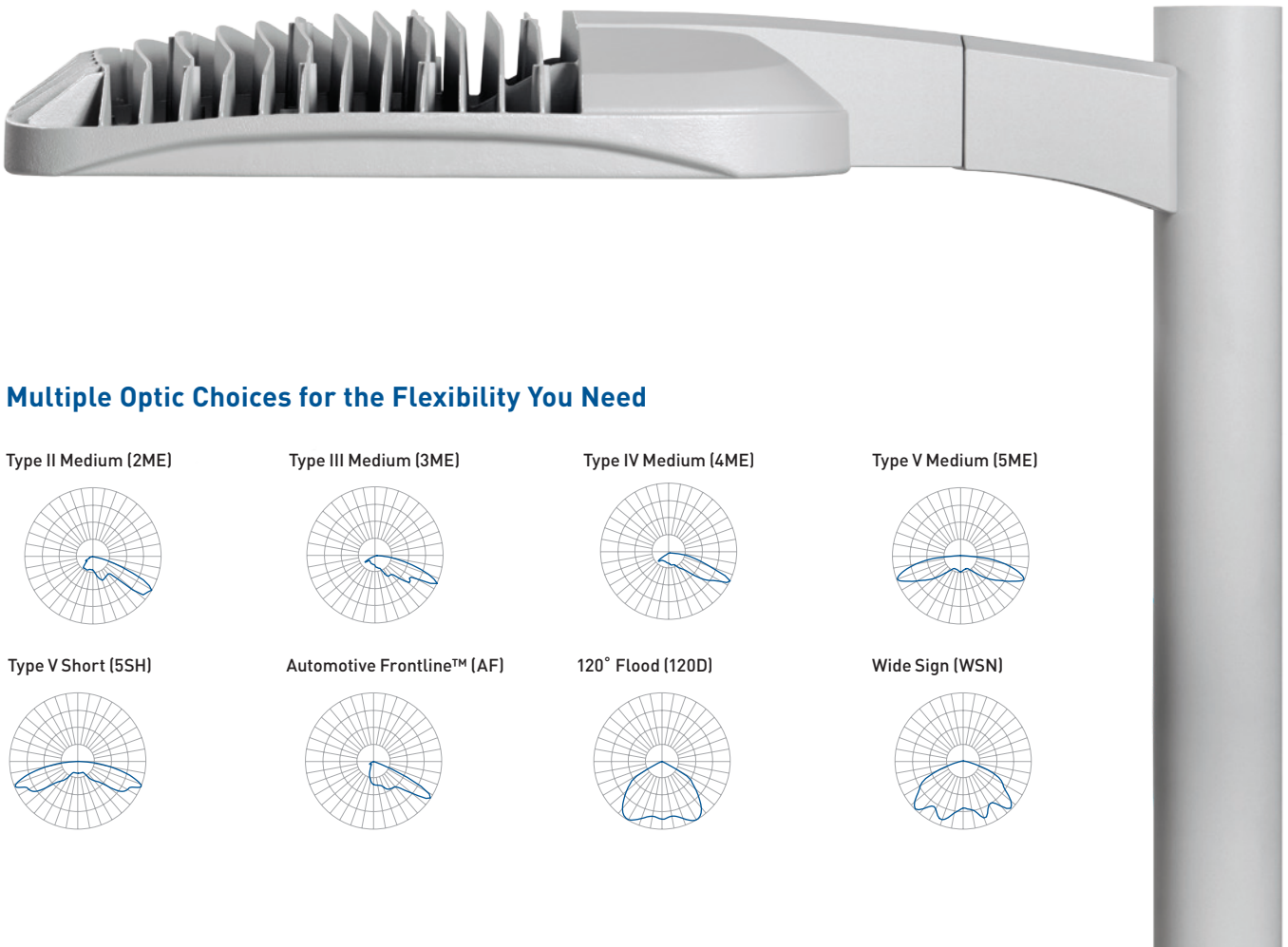
### Salt Fog Test Results

The same 3mm thickness of powder topcoat was applied to each of the four pole section samples (shown left), which were then scored and exposed to a salt fog test for 2,500 hours. The results are clear — our Colorfast DeltaGuard finish stood up to the test, proving our ability to protect your investment even in the most grueling conditions.

Visit [lighting.cree.com](http://lighting.cree.com) to learn more.

# OPTICS YOU CAN COUNT ON.

Traditional luminaire technologies offer limited optical selections. With our patented NanoOptic® Technology, the choices keep coming. We have highly-efficient optics available in multiple distributions to provide new possibilities for highly-optimized target illumination performance and the flexibility you need to achieve the specific illumination requirements for each unique application.

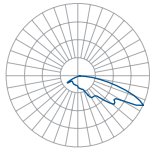


## Multiple Optic Choices for the Flexibility You Need

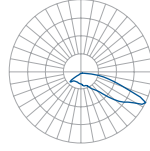
Type II Medium (2ME)



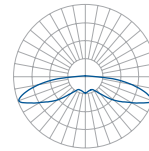
Type III Medium (3ME)



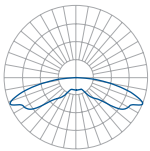
Type IV Medium (4ME)



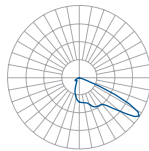
Type V Medium (5ME)



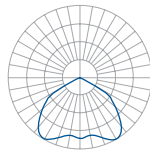
Type V Short (5SH)



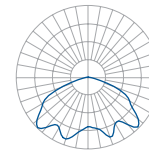
Automotive Frontline™ (AF)



120° Flood (120D)



Wide Sign (WSN)

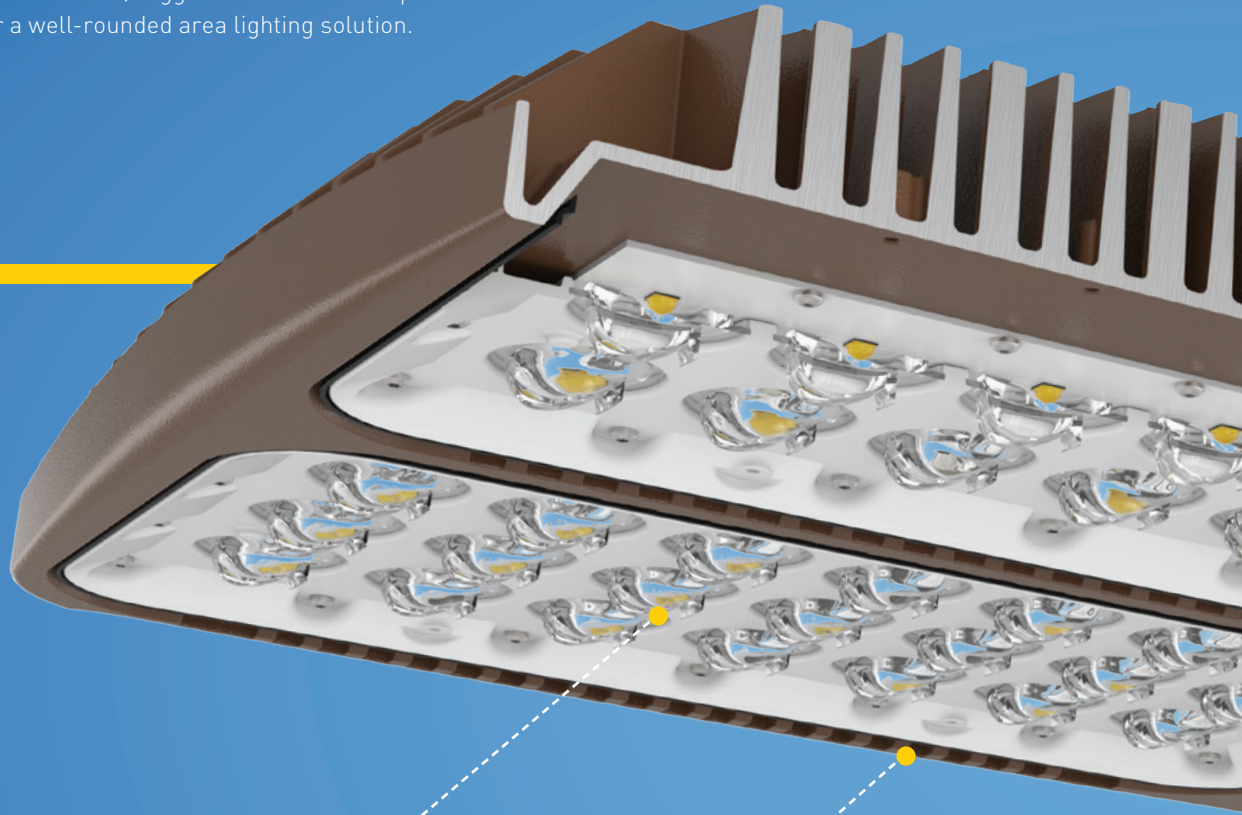


This graphic representation illustrates the LED optical fine-tuning range that Cree can provide. The gray area represents Type V Short optic coverage used to comply with more stringent light spill and high angle brightness specifications or codes by incorporating a lower main beam. The extended blue area indicates the Type V Medium optic coverage that uses a slightly higher main beam to allow wider, more economical pole spacing.

### LED Optical Fine-Tuning Range

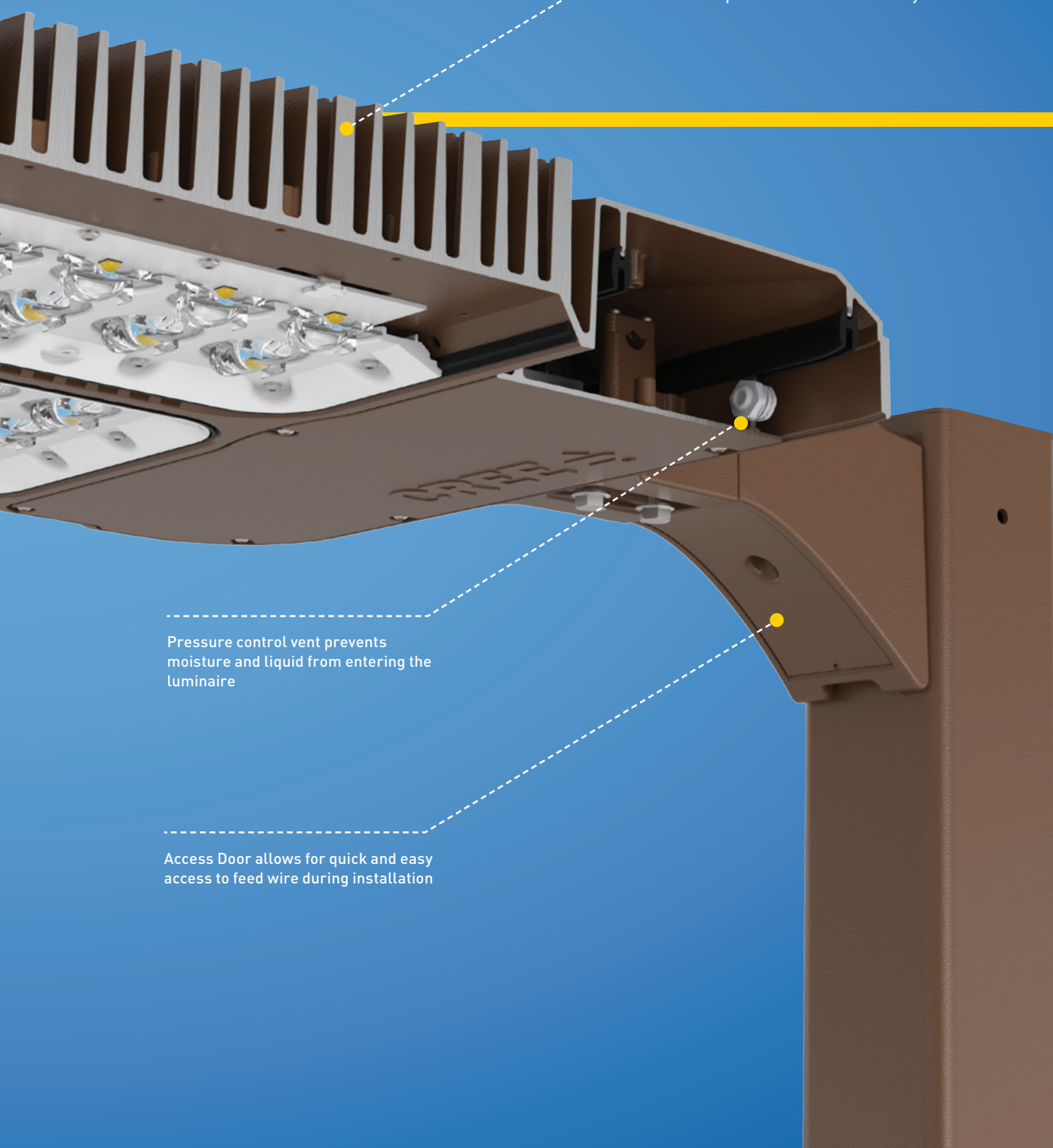
# TIMELESS DESIGN WITH THE TECHNOLOGY OF THE FUTURE.

Cree blends architectural aesthetics, rugged mechanics and optimal performance together for a well-rounded area lighting solution.



NanoOptic® Precision Delivery Grid™ optics efficiently deliver light where you need it, not where you don't. Innovation in LED and optical technologies allows the OSQ Series to deliver unmatched target efficacy, and the lowest total cost of ownership compared to previous generations of Cree LED Area Lights

Our exclusive Colorfast DeltaGuard® finish features an industry-leading 10-year warranty. The housing goes through six cleaning stages, eight pretreatment stages and an epoxy e-coat before the baked on, ultra-durable powder topcoat is applied



Passive thermal management approach utilizes a flow through heat sink to efficiently draw heat away from the LED chip package, maximizing performance and reliability

Pressure control vent prevents moisture and liquid from entering the luminaire

Access Door allows for quick and easy access to feed wire during installation

# SEEKING BETTER LIGHT

The OSQ Series blends extreme optical control, advanced thermal management and light quality to bring you the latest advancements in LED technology. And we didn't stop there — we added a clean, modern housing and versatile mounting options all with an attractive price point. Whether you have a new construction or upgrade application, the OSQ Series is perfect for parking lots, internal roadways and general site lighting.

## PRODUCT SUMMARY

Efficacy: Up to 139 LPW

NanoOptic® Precision Delivery Grid™ optic

Made in the U.S.A. of U.S. and imported parts

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

## ACCESSORIES

### Backlight Shield

Designed to control backlight - put the light where you want it and not where you don't.

### Bird Spikes

Designed to prevent birds from landing or setting up a nest on the luminaire.

### Hand-Held Remote

For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required. OSQ Medium and Large only.

## CERTIFICATIONS



## 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
- Convenient interlocking mounting method on direct arm mount. Mounting adapter is rugged die cast aluminum and mounts to 3-6" [76-152mm] square or round pole, secured by two 5/16-18 UNC bolts spaced on 2" [51mm] centers
- Adjustable arm that mounts to a horizontal or vertical 2" [51mm] IP, 2.375-2.50" [60-64mm] O.D. steel tenon. Tenon length must be a minimum of 3.75" [95mm]
- Adjustable arm mount can be adjusted 180° in 5.0° increments
- Includes 13.4" [340mm] 18/5 or 16/5 leads exiting the luminaire. When ordered with R option, 13.4" [340mm] 18/7 or 16/7 leads are provided
- Designed for uplight and downlight applications
- 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.

## ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 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
- **10V Source Current:** 0.15mA; 0.30mA (OSQ-HO)

## REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed (65L pending)
- Suitable for wet locations
- Consult factory for CE Certified products
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- DLC and DLC Premium qualified versions available. Some exceptions apply.\*
- Enclosure rated IP66 per IEC 60598-1 when ordered without the R option

\*Please refer to [www.designlights.org/QPL](http://www.designlights.org/QPL) for most current information.

†For complete details on Cree 10-year limited warranty go to [lighting.cree.com/warranty](http://lighting.cree.com/warranty)

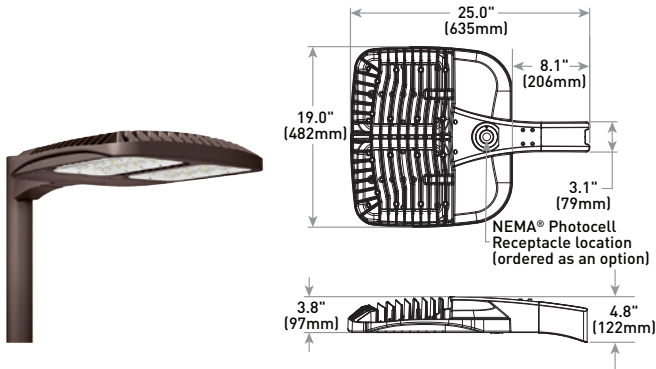
Product specifications subject to change at any time. Visit [lighting.cree.com](http://lighting.cree.com) to find the most up-to-date information.

 McLaren



# OSQ MEDIUM

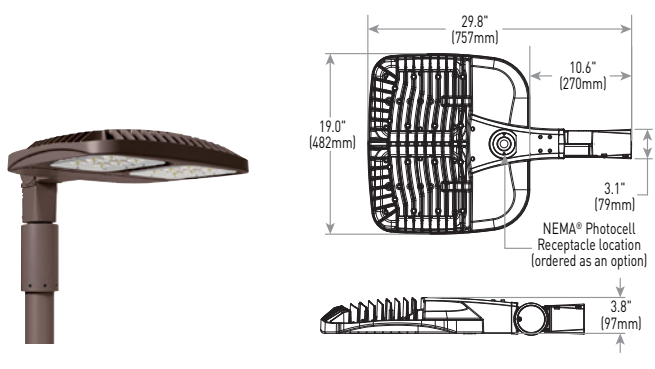
UP TO 400W HID REPLACEMENT



PERFORMANCE SUMMARY
<b>Initial Delivered Lumens:</b> Up to 17,291 lumens
<b>Input Power:</b> 86 watts; 130 watts
<b>Color Rendering Index (CRI):</b> Minimum 70 CRI (4000K & 5700K; 3000K asymmetric optics); 80 CRI (3000K symmetric optics)
<b>Dimensions:</b> Direct Arm: L: 25" (635mm) / W: 19" (482mm) / H: 4.8" (122mm) Adjustable Arm: L: 27.6" (701mm) / W: 19" (482mm) / H: 3.8" (97mm)
<b>CCT:</b> 3000K (+/- 300K), 4000K (+/- 300K), 5700K (+/- 500K)
<b>Weight:</b> 26.5 lbs. (12kg)
<b>Replaces up to:</b> 250W HID ('B' Input power designator); 400W HID ('K' Input power designator)

# OSQ LARGE

UP TO 1000W HID REPLACEMENT



PERFORMANCE SUMMARY
<b>Initial Delivered Lumens:</b> Up to 27,103 lumens
<b>Input Power:</b> 166 watts; 215 watts
<b>Color Rendering Index (CRI):</b> Minimum 70 CRI (4000K & 5700K; 3000K asymmetric optics); 80 CRI (3000K symmetric optics)
<b>Dimensions:</b> Direct Arm: L: 29.8" (757mm) / W: 19" (482mm) / H: 4.8" (122mm) Adjustable Arm: L: 27.2" (691mm) / W: 19" (482mm) / H: 3.8" (97mm)
<b>CCT:</b> 3000K (+/- 300K), 4000K (+/- 300K), 5700K (+/- 500K)
<b>Weight:</b> 28.5 lbs. (13kg)
<b>Replaces up to:</b> 750W HID ('T' Input power designator); 1000W HID ('U' Input power designator)

## ORDERING INFORMATION

**Mount** (Luminaire must be ordered separately)

**Example: Mount: OSQ-AASV + Luminaire: OSQ-A-NM-2ME-B-40K-UL-SV**

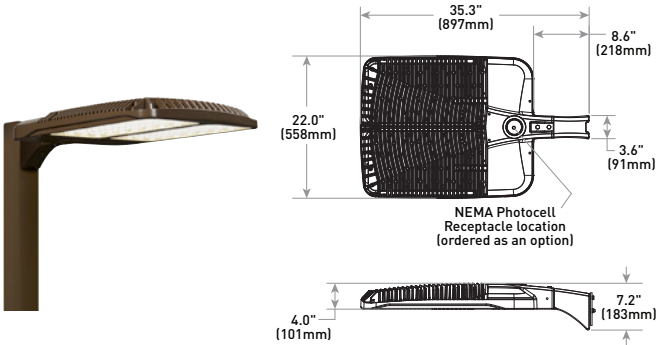
Product	Color Options
OSQ-AA Adjustable Arm OSQ-DA Direct Arm	SV Silver BK Black BZ Bronze WH White

**Luminaire** (Mount must be ordered separately)

Product	Version	Mounting	Optic	Input Power Designator	CCT	Voltage	Color Options	Options
OSQ	A	NM No Mount	<b>Asymmetric</b> 2ME Type II Medium 3ME Type III Medium 4ME Type IV Medium <b>Symmetric</b> 5ME Type V Medium 5SH Type V Short WSN Wide Sign 15D 15° Flood 25D 25° Flood 40D 40° Flood 60D 60° Flood	B 86W K 130W T 166W U 215W	30K 3000K 40K 4000K 57K 5700K	UL Universal 120-277V UH Universal 347-480V	BK Black BZ Bronze SV Silver WH White	DIM 0-10V Dimming F Fuse ML Multi-Level PML Programmable Multi-Level, 20-40' Mounting Height PML2 Programmable Multi-Level, 10-30' Mounting Height Q9 Field Adjustable Output R NEMA® Photocell Receptacle RL Rotate Left RR Rotate Right


# OSQ HIGH OUTPUT

## MULTIPLE 1000W HID REPLACEMENT



PERFORMANCE SUMMARY
Utilizes Cree TrueWhite® Technology on 5000K Luminaires
<b>Initial Delivered Lumens:</b> Up to 68,691 lumens
<b>Input Power:</b> Up to 550 watts; 341W; 420W or 550W
<b>Color Rendering Index (CRI):</b> Minimum 70 CRI (3000K, 4000K & 5700K); 90 CRI (5000K)
<b>CCT:</b> 3000K (+/- 300K), 4000K (+/- 300K), 5000K (+/- 300K), 5700K (+/- 500K)
<b>Dimensions:</b> Direct Arm: L: 35.3" (897mm) / W: 22" (558mm) / H: 7.2" (183mm) Adjustable Arm: L: 38.1" (968mm) / W: 22" (558mm) / H: 4.6" (118mm)
<b>Weight:</b> DA Mount: 67.5 lbs. (30.6kg); AA Mount: 70.9 lbs. (32.2kg)
<b>Replaces:</b> Multiple 1000W HID


### APPLICATIONS




**Parking**  
Whether you're trying to attract business or simply want to create a safe and secure environment, well lit parking lots are extremely important and offer significant savings. The OSQ Series delivers energy savings up to 80 percent when compared to HID lights — a dramatic improvement to both parking lots and pocketbooks.



**Internal Roadway**  
With uniform targeted illumination, the OSQ luminaire minds its own business by directing light only where it's needed and provides precise cut-off where it isn't. Equipped with advanced optical control, the luminaire reduces light pollution and minimizes wasted energy.



**Flood**  
Bathe your outdoor façades and signage in crisp, uniform white light that creates an impressive and inviting space. With remarkable color quality and smooth white light, buildings will stand out in the crowd.



**High Mast**  
Extreme mounting heights leads to higher costs in maintenance. Avoid unnecessary relamping with our OSQ-HO luminaires that are built to last. Compared to other area lighting options, the OSQ-HO is smaller and lighter, making it easier to install with existing high mast rings. Oh, and we have a 10 year limited warranty.



**Automotive**  
Attract customers with an outdoor showcase that leads to a better shopping experience. Available with Cree TrueWhite® Technology and utilizing our FrontlineOptic™, the OSQ™ High Output delivers exceptional color quality (90CRI) to the frontline — ensuring true-to-life paint colors are on full display.

### ORDERING INFORMATION

**Mount** (Luminaire must be ordered separately) Example: Mount: OSQ-HO-AA-SV + Luminaire: OSQ-HO-A-NM-2ME-40L-40K-UL-SV

Product		Color Options	
OSQ-HO-AA	Adjustable Arm	SV	Silver
OSQ-HO-DA	Direct Arm	BK	Black
		BZ	Bronze
		WH	White

**Luminaire** (Mount must be ordered separately)

Product	Version	Mounting	Optic	Lumen Package	CCT	Voltage	Color Options	Options
OSQ-HO High Output	A	NM No Mount	<b>Asymmetric</b>	40L 50L 65L	30K 3000K 40K 4000K 50K 5000K (90 CRI) 57K 5700K	UL Universal 120-277V UH Universal 347-480V UM Universal 208-480V	BK Black BZ Bronze SV Silver WH White	F Fuse Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1 Field Adjustable Output R NEMA® 7-Pin Photocell Receptacle RL Rotate Left RR Rotate Right
			2ME Type II Medium					
			3ME Type III Medium					
			4ME Type IV Medium					
			AF Automotive FrontlineOptic™					
			<b>Symmetric</b>					
			5ME Type V Medium					
			5SH Type V Short					
			WSN Wide Sign					
			15D 15° Flood					
			25D 25° Flood					
			40D 40° Flood					
			60D 60° Flood					
			120D 120° Flood					

Product specifications subject to change at any time. Visit [lighting.cree.com](http://lighting.cree.com) to find the most up-to-date information.

Visit [lighting.cree.com](http://lighting.cree.com) or contact a Cree lighting representative to learn more.

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