OSQ Series

LED Area Luminaire - Large

Product Description

The OSQ™ Area luminaire blends extreme optical control, advanced thermal management and modern, $clean\ aesthetics.\ Built\ to\ last, the\ housing\ is\ rugged\ cast\ aluminum\ with\ an\ integral,\ we athertight\ LED$ driver compartment. Versatile mounting configurations offer simple installation. Its slim, low-profile design minimizes wind load requirements and blends seamlessly into the site providing even, quality illumination. 'S' Input power designator is a suitable upgrade for HID applications up to 400 Watts Applications: Parking lots, walkways, campuses, auto dealerships, office complexes, and internal roadways.

Performance Summary

Utilizes BetaLED® Technology

NanoOptic® Precision Delivery Grid™ optic

CRI: Minimum 70 CRI (4000K & 5700K); 80 CRI (3000K)

CCT: 3000K (+/- 300K), 4000K (+/- 300K), 5700K (+/- 500K)

Limited Warranty[†]:

Class 1: 10 years on luminaire and finish

Class 2: 5 years on luminaire / 10 years on finish

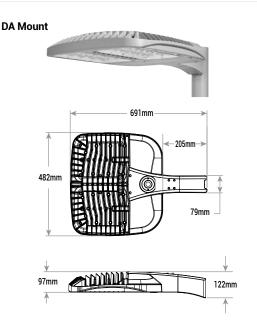
Accessories

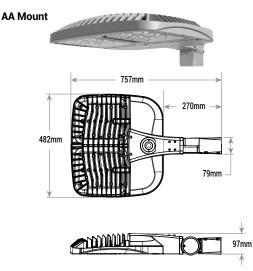
| Field-Installed | |
|-------------------------------|----------------------------|
| Backlight Shield OSQ-BLSLF | OSQ-BLSLR - Rotated optics |

Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately: Example: Mount: OSQ-AA SV + Luminaire: OSQ A NM 2ME S 40K-UL SV

| Mount (Luminaire must be ordered separately) | | | | | |
|--|----------------|-----------------------|--|----------|--|
| OSQ- | | | | | |
| OSQ-AA Adjustable Arm OSQ-DA Direct Arm | Color Options: | SV Silver BK Black | BZ Bronze PB Silver Bronze | WH White | |





| OSQ | A | NM | 2ME | S | 30K | + | UL | SV | F | |
|---------|---------|----------------|---|---------------------------|--|---------------------|-----------------------------|--|--|----------------------------|
| Product | Version | Mounting | Optic | Input Power Designator | сст | - | Voltage | Color Options | Options | |
| osq | A | NM No Mount | 2ME* Type II Medium 3ME* Type III Medium 4ME* Type IV Medium 5ME Type V Medium 5SH Type V Short | \$ 223W | 30K 3000K 40K 4000K 57K 5700K | + Class 1 A Class 2 | UL Universal 220-240V | SV Silver BK Black BZ Bronze PB Silver Bronze WH White | DIM 1-10V Dimming - Control by others - Can't exceed wattage of specified input power designator Q9 Level factory set - Power levels from 1 to 8 to be set on field by the installer RL Rotate Left - LED and opti rotated to the rotated to the VM Virtual Midnig | e left c are e right |

See www.cree.com/lighting/products/warranty for warranty terms
 Available with Backlight Shield when ordered with field-installed accessory (see table above)





Product Specifications

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 76-152mm square or round pole, secured by two 5/16-18 UNC bolts spaced on 51mm centers
- Mounting for the adjustable arm mount adapter is rugged die cast aluminum and mounts to 60mm 0.D. tenon
- · Adjustable arm mount can be adjusted 180° in 2.5° increments
- · 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. Silver, bronze, black, white, and silver bronze are available
- · Weight: 13kg

ELECTRICAL SYSTEM

Input Voltage: 120-277V or 50/60Hz

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

- · CE and ENEC Listed
- Suitable for wet locations
- · Enclosure rated IP66 per IEC 60529
- Pending certification to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2 (only for Class 1)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117

| Electrical Data* | | | | |
|---------------------------|--------------------------|---------------|--|--|
| | | Total Current | | |
| Input Power Designator | System Watts 220-240V | 230V | | |
| S | 223 | 0.99 | | |

^{*} Electrical data at 25°C (77°F)

| Recomn | Recommended Cree® Outdoor Luminaire Lumen Maintenance Factors (LMF)¹ | | | | | |
|----------------|--|----------------|---|---|--|---|
| Ambient | Input Power Designator | Initial LMF | 25K hr Projected ² LMF | 50K hr Projected ² LMF | 75K hr Calculated ³ LMF | 100K hr Calculated ³ LMF |
| 5°C (41°F) | S | 1.04 | 0.99 | 0.94 | 0.88 | 0.84 |
| 10°C (50°F) | S | 1.03 | 0.98 | 093 | 0.88 | 0.83 |
| 15°C (59°F) | S | 1.02 | 0.97 | 0.92 | 0.87 | 0.83 |
| 20°C (68°F) | S | 1.01 | 0.96 | 0.91 | 0.86 | 0.82 |
| 25°C (77°F) | S | 1.00 | 0.95 | 0.90 | 0.85 | 0.81 |

¹Lumen maintence values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing
²In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times
(6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (IOUT) i.e. the packaged LED chip)
³In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total
test duration (in hours) for the device under testing (IOUT) i.e. the packaged LED chip)

| Weight and Maximum Wind Area | | | |
|------------------------------|------------------------------|--|--|
| Weight 220-240V | Lateral Surface Wind Exposed | | |
| 13 kg | 0,074 m ² | | |

| Field Adjustable Output | | | | |
|-------------------------|--------------------------|-------------------|--|--|
| Setting* | System Watts 240-240V | Lumen Multipliers | | |
| , | Input Power Designator S | | | |
| 9 (Standard) | 223 | 1,00 | | |
| 8 | 213 | 0,98 | | |
| 7 | 202 | 0,94 | | |
| 6 | 191 | 0,91 | | |
| 5 | 175 | 0,85 | | |
| 4 | 160 | 0,80 | | |
| 3 | 144 | 0,73 | | |
| 2 | 128 | 0,68 | | |
| 1 | 112 | 0,61 | | |

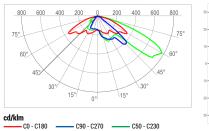
^{*} Power levels from 1 to 8 to be set on field by the installer

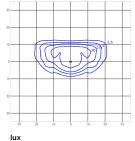


Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified laboratory. To obtain an IES file specific to your project consult: http://www.cree-europe.com.

2ME (TM)



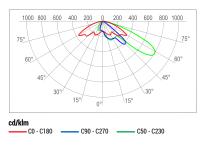


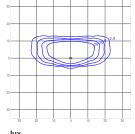
| Lumen Output- 2ME Distribution (Type II Medium) | | | | |
|---|---------------------------------|---------------------------------|---------------------------------|--|
| Input | 3000K | 4000K | 5700K | |
| Power Designator | Initial Delivered Lumens* | Initial Delivered Lumens* | Initial Delivered Lumens* | |
| S | 18.460 | 21.976 | 23.298 | |

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

Test Report #: PL03347-001





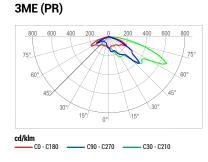


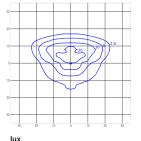
OSQANM2MEJ40K w/BLS Mounting Height: 8m Initial Delivered Lumens: 14643

| Lumen Output- 2ME Distribution (Type II Medium w/BLS) | | | | | |
|---|---------------------------------|---------------------------------|---------------------------------|--|--|
| Innut | 3000K | 4000K | 5700K | | |
| Input Power Designator | Initial Delivered Lumens* | Initial Delivered Lumens* | Initial Delivered Lumens* | | |
| S | 16.400 | 19.524 | 20.698 | | |

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

Test Report #: PL03642-003



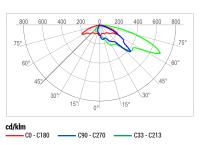


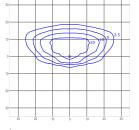
Lumen Output- 3ME Distribution (Type III Medium) 3000K 4000K 5700K Input Initial Initial Initial Power Delivered Delivered Delivered Designator Lumens* Lumens* Lumens* 18.221 21.692

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

Test Report #: PL03495-001







OSQANM3MEJ40K w/BLS Mounting Height: 8m Initial Delivered Lumens: 14229

| Lumen Output- 3ME Distribution (Type III Medium w/BLS) | | | | | |
|--|---------------------------------|---------------------------------|---------------------------------|--|--|
| Input | 3000K | 4000K | 5700K | | |
| Power Designator | Initial Delivered Lumens* | Initial Delivered Lumens* | Initial Delivered Lumens* | | |
| S | 15.936 | 18.972 | 20.113 | | |

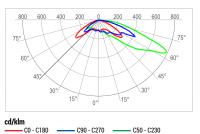
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

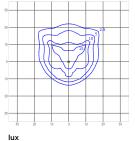
Test Report #: PL03642-001

Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified laboratory. To obtain an IES file specific to your project consult: http://www.cree-europe.com.

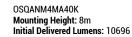
4ME (AC)

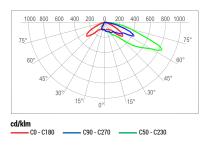


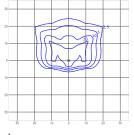


Lumen Output- 4ME Distribution (Type IV Medium) 3000K 4000K 5700K Input Initial Initial Initial Power Delivered Delivered Delivered Designator Lumens* Lumens* Lumens* S 17.969 21.391 22 678

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens







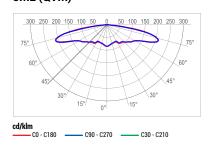
OSQANM4MEJ40K w/BLS Mounting Height: 8m Initial Delivered Lumens: 13647

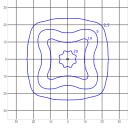
| Lumen Output- 4ME Distribution (Type IV Medium w/BLS) | | | | |
|---|---------------------------------|---------------------------------|---------------------------------|--|
| Input | 3000K | 4000K | 5700K | |
| Power Designator | Initial Delivered Lumens* | Initial Delivered Lumens* | Initial Delivered Lumens* | |
| S | 15.285 | 18.196 | 19.291 | |

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

Test Report #: PL03642-002

5ME (QVM)





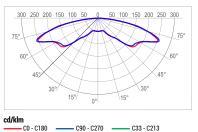
| Lumen Output- 5ME Distribution (Type V Medium) | | | |
|--|---------------------------------|---------------------------------|---------------------------------|
| Input | 3000K | 4000K | 5700K |
| Power Designator | Initial Delivered Lumens* | Initial Delivered Lumens* | Initial Delivered Lumens* |
| S | 17.422 | 20.709 | 20.933 |

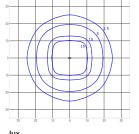
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

Test Report #: PL03466-001

OSQANM5MS40K Mounting Height: 8m Initial Delivered Lumens: 20709

5SH (QVS)





OSQANM5HS40K Mounting Height: 8m Initial Delivered Lumens: 21066

| Lumen Output- 5SHME Distribution (Type V Short) | | | |
|---|---------------------------------|---------------------------------|---------------------------------|
| Input Power Designator | 3000K | 4000K | 5700K |
| | Initial Delivered Lumens* | Initial Delivered Lumens* | Initial Delivered Lumens* |
| S | 17.722 | 21.066 | 21.294 |

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens



Test Report #: PL03501-001

Test Report #: PL03346-001