

OSQ Series

LED Area/Flood Luminaire – Medium

Product Description

The OSQ™ Area/Flood luminaire blends extreme optical control, advanced thermal management and modern, clean aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weathertight 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. 'A' Input power designator is a suitable upgrade for HID applications up to 250 Watt. 'J' Input power designator is a suitable upgrade for HID applications up to 400 Watt.

Applications: Parking lots, walkways, campuses, car dealerships, office complexes, and internal roadways

Performance Summary

Utilizes BetaLED® Technology

NanoOptic® Precision Delivery Grid™ optic

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

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

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

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

Accessories

Field-Installed	
Backlight Shield OSQ-BLSMF – Front facing optics	OSQ-BLSMR – 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 A 40K-UL SV

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

Luminaire (Mount must be ordered separately)										
OSQ	A	NM								
Product	Version	Mounting	Optic		Input Power Designator	CCT	—	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	15D 15° Flood 25D 25° Flood 40D 40° Flood 60D 60° Flood	A 112W J 168W	30K 3000K 40K 4000K 57K 5700K	— US * Canada	UL Universal 120-277V UH Universal 347-480V	SV Silver BK Black BZ Bronze PB Platinum Bronze WH White	DIM 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed wattage of specified input power designator F Fuse - When code dictates fusing, use time delay fuse ML Multi-Level - Refer to ML spec sheet for details - High: 100%, Low: 30% - Intended for downlight applications at 0° tilt Q9 Field Adjustable Output - Refer to Field Adjustable Output spec sheet for details R NEMA® Photocell Receptacle - Intended for downlight applications with maximum 45° tilt - Photocell by others RL Rotate Left - LED and optic are rotated to the left RR Rotate Right - LED and optic are rotated to the right

* See www.cree.com/lighting/products/warranty for warranty terms

* Available with Backlight Shield when ordered with field-installed accessory (see table above)



Rev. Date: V4 08/22/2014

US: www.cree.com/lighting

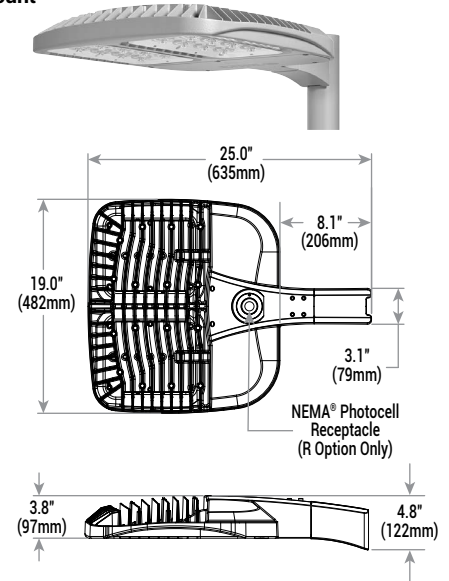
T (800) 236-6800 F (262) 504-5415

Canada: www.cree.com/canada

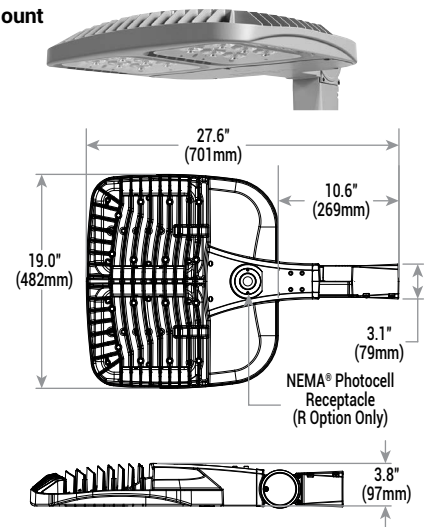


T (800) 473-1234 F (800) 890-7507

DA Mount



AA Mount



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 3-6" (76-152mm) square or round pole, secured by two 5/16-18 UNC bolts spaced on 2" (51mm) centers
- Mounting for the adjustable arm mount adapter is rugged die cast aluminum and mounts to 2" (51mm) IP, 2.375" (60mm) O.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 platinum bronze are available
- **Weight:** 26.5 lbs. (12kg)

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
- To address inrush current, slow blow fuse or type C/D breaker should be used

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529 when ordered without R option
- Consult factory for CE Certified products
- 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
- 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 qualified when ordered with 30K (5ME, 5SH optics), 40K (2ME, 3ME, 4ME, 5ME, 5SH optics), or 57K (2ME, 3ME, 4ME, 5ME, 5SH optics). Please refer to <http://www.designlights.org/QPL> for most current information

Electrical Data*							
Input Power Designator	System Watts 120-480V	Total Current					
		120V	208V	240V	277V	347V	480V
A	112	0.97	0.56	0.49	0.43	0.34	0.25
J	168	1.47	0.85	0.74	0.64	0.50	0.36

* Electrical data at 25°C (77°F)

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)	A	1.04	0.99	0.94	0.88	0.84
	J					
10°C (50°F)	A	1.03	0.98	0.93	0.88	0.83
	J					
15°C (59°F)	A	1.02	0.97	0.92	0.87	0.83
	J					
20°C (68°F)	A	1.01	0.96	0.91	0.86	0.82
	J					
25°C (77°F)	A	1.00	0.95	0.90	0.85	0.81
	J					

¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

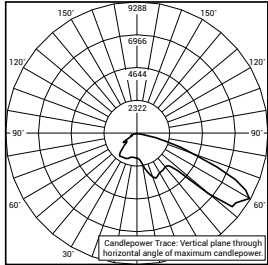
² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip)

³ In 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 ((DUT) i.e. the packaged LED chip)

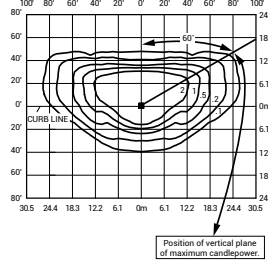
Photometry

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.com/lighting>.

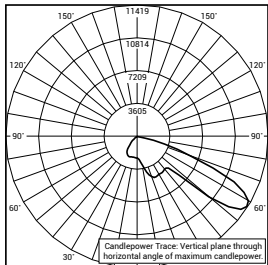
2ME



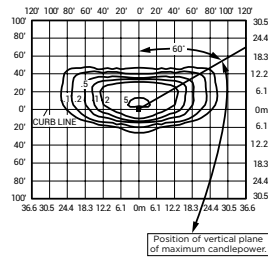
RESTL Test Report #: PL03347-001
OSQ A ** 2ME A 40K-UL
Initial Delivered Lumens: 10,988



OSQ A ** 2ME J 40K-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 16,356
Initial FC at grade



RESTL Test Report #: PL03642-003
OSQ A ** 2ME J 40K-UL w/OSQ-BLSMF
Initial Delivered Lumens: 14,643



OSQ A ** 2ME J 40K-UL w/OSQ-BLSMF
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 14,020
Initial FC at grade

Type II Medium Distribution

Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
A	9,136	B2-U0-G1	10,904	B2-U0-G2	11,649	B2-U0-G2
J	13,703	B2-U0-G2	16,356	B3-U0-G2	17,474	B3-U0-G2

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

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.iesna.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

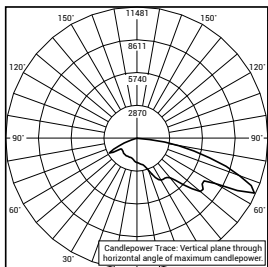
Type II Medium w/BLS Distribution

Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
A	7,831	B1-U0-G1	9,346	B2-U0-G2	9,985	B2-U0-G2
J	11,746	B2-U0-G2	14,020	B2-U0-G2	14,978	B2-U0-G2

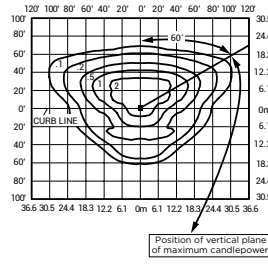
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

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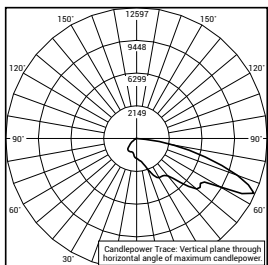
3ME



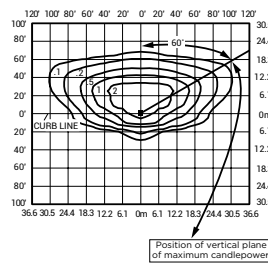
RESTL Test Report #: PL03478-001
OSQ A ** 3ME J 40K-UL
Initial Delivered Lumens: 16,257



OSQ A ** 3ME J 40K-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 16,189
Initial FC at grade



RESTL Test Report #: PL03642-001
OSQ A ** 3ME J 40K-UL w/OSQ-BLSMF
Initial Delivered Lumens: 14,229



OSQ A ** 3ME J 40K-UL w/OSQ-BLSMF
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,853
Initial FC at grade

Type III Medium Distribution

Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
A	9,042	B2-U0-G2	10,793	B2-U0-G2	11,530	B2-U0-G2
J	13,564	B3-U0-G3	16,189	B3-U0-G3	17,296	B3-U0-G3

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

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Type III Medium w/BLS Distribution

Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
A	7,737	B1-U0-G2	9,235	B1-U0-G2	9,866	B1-U0-G2
J	11,606	B1-U0-G2	13,853	B2-U0-G3	14,799	B2-U0-G3

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

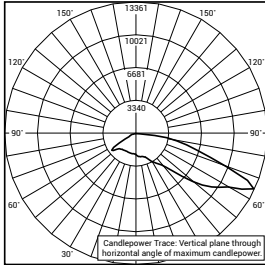
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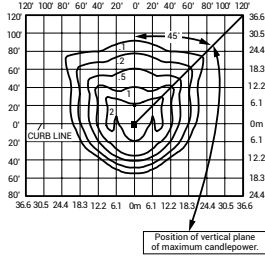
Photometry

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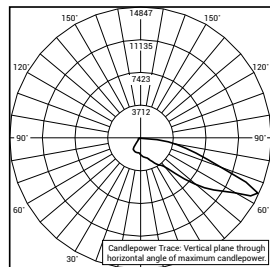
4ME



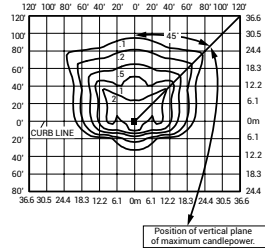
RESTL Test Report #: PL03496-001
OSQ A ** 4ME J 40K-UL
Initial Delivered Lumens: 16,293



OSQ A ** 4ME J 40K-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 16,022
Initial FC at grade



RESTL Test Report #: PL03642-002
OSQ A ** 4ME J 40K-UL w/OSQ-BLSMF
Initial Delivered Lumens: 13,647



OSQ A ** 4ME J 40K-UL w/OSQ-BLSMF
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 14,020
Initial FC at grade

Type IV Medium Distribution						
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
A	8,949	B2-U0-G2	10,682	B2-U0-G2	11,412	B2-U0-G3
J	13,424	B3-U0-G3	16,022	B3-U0-G3	17,117	B3-U0-G3

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

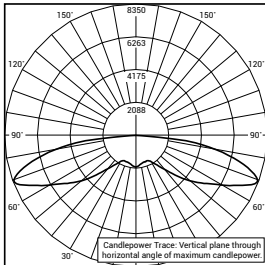
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.iesna.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

Type IV Medium w/BLS Distribution						
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
A	7,644	B1-U0-G2	9,124	B1-U0-G2	9,747	B1-U0-G2
J	11,466	B2-U0-G3	13,686	B2-U0-G3	14,621	B2-U0-G3

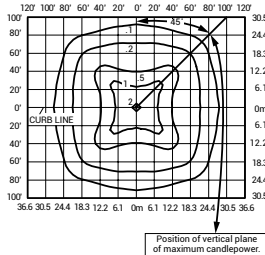
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

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5ME



RESTL Test Report #: PL03466-001
OSQ A ** 5ME S 40K-UL
Initial Delivered Lumens: 20,709



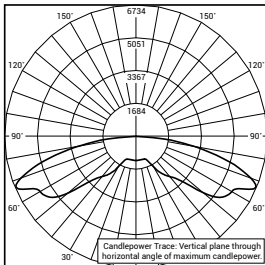
OSQ A ** 5ME S 40K-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 15,480
Initial FC at grade

Type V Medium Distribution						
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
A	8,716	B3-U0-G3	10,320	B4-U0-G3	10,473	B4-U0-G3
J	13,075	B4-U0-G4	15,480	B4-U0-G4	15,710	B4-U0-G4

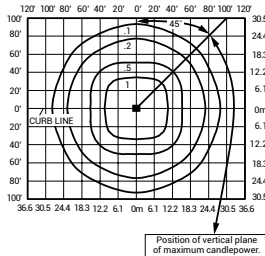
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.iesna.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

5SH



RESTL Test Report #: PL03501-001
OSQ A ** 5SH S 40K-UL
Initial Delivered Lumens: 21,066



OSQ A ** 5SH S 40K-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 15,817
Initial FC at grade

Type V Short Distribution						
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
A	8,906	B3-U0-G3	10,544	B4-U0-G3	10,701	B4-U0-G3
J	13,359	B4-U0-G3	15,817	B4-U0-G4	16,052	B4-U0-G4

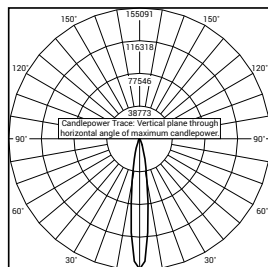
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

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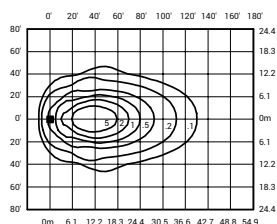
Photometry

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15D



RESTL Test Report #: PL03903-001
OSQ A ** 15D S 40K-UL
Initial Delivered Lumens: 22,600



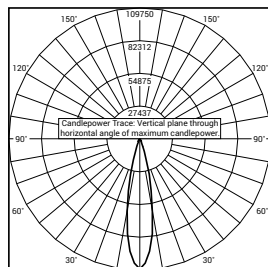
OSQ A ** 15D J 40K-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 16,153
60° Tilt
Initial FC at grade

15° Flood Distribution

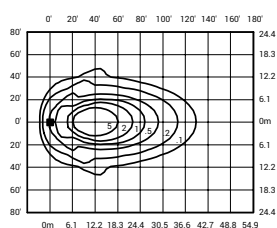
Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	9,095	10,769	10,929
J	13,643	16,153	16,393

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

25D



RESTL Test Report #: PL03903-002
OSQ A ** 25D S 40K-UL
Initial Delivered Lumens: 22,633



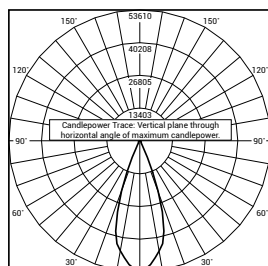
OSQ A ** 25D J 40K-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 16,153
60° Tilt
Initial FC at grade

25° Flood Distribution

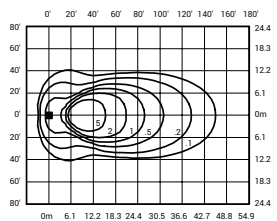
Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	9,095	10,769	10,929
J	13,643	16,153	16,393

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

40D



RESTL Test Report #: PL03903-003
OSQ A ** 40D S 40K-UL
Initial Delivered Lumens: 22,404



OSQ A ** 40D J 40K-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 15,985
60° Tilt
Initial FC at grade

40° Flood Distribution

Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	9,001	10,657	10,815
J	13,501	15,985	16,222

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

OSQ Series – Medium

Luminaire EPA

Fixed Arm Mount – OSQ-DA Weight: 26.5 lbs. (12kg)							
Single	2 @ 180°	2 @ 90°	3 @ 90°	3 @ 120°	3 @ 180°	4 @ 180°	4 @ 90°
							
0.74	1.48	1.19	1.93	1.63	3.33	4.66	2.38

Adjustable Arm Mount – OSQ-AA Weight: 26.5 lbs. (12kg)							
Single	2 @ 180°	2 @ 90°	3 @ 90°	3 @ 120°	3 @ 180°	4 @ 180°	4 @ 90°
Tenon Configuration (0°-80° Tilt); If used with Cree tenons, please add tenon EPA with Luminaire EPA							
							
PB-1A*; PT-1; PW-1A3**	PB-2A*; PB-2R2.375; PD-2A4(180); PT-2(180); PW-2A3**	PB-2A*; PD-2A4(90); PT-2(90)	PB-3A*; PD-3A4(90); PT-3(90)	PB-3A*; PT-3(120)	PB-3A*; PB-3R2.375	PB-4A*(180)	PB-4A*(90); PB-4R2.375; PD-4A4(90); PT-4(90)
0° Tilt							
0.74	1.48	1.19	1.93	1.63	3.33	4.66	2.38
10° Tilt							
0.75	1.48	1.49	2.23	2.15	4.22	5.84	2.98
20° Tilt							
1.12	1.48	1.86	2.60	2.85	5.31	7.32	3.72
30° Tilt							
1.46	1.48	2.20	2.94	3.56	6.34	8.68	4.40
45° Tilt							
1.96	1.96	2.69	3.43	4.54	7.83	10.68	5.38
60° Tilt							
2.33	2.33	3.07	3.81	5.11	8.94	12.16	6.14
70° Tilt							
2.49	2.49	3.23	3.97	5.11	9.43	12.80	6.46
80° Tilt							
2.58	2.58	3.32	4.06	5.11	9.71	13.16	6.64
Tenon Configuration (90° Tilt); If used with Cree tenons, please add tenon EPA with Luminaire EPA							
PB-1A*; PT-1; PW-1A3**	PB-2A*; PB-2R2.375; PD-2A4(180); PT-2(180); PW-2A3**	PB-2A*	PB-3A*	PB-3A*; PT-3(120)	PB-3A*; PB-3R2.375	PB-4A*(180)	PB-4A*(90); PB-4R2.375
90° Tilt							
2.61	2.61	4.44	6.05	5.11	9.79	13.28	10.39

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation

** Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")



Tenon EPA

Tenon	EPA
PB-1A*	None
PB-2A*	0.82
PB-3A*	1.52
PB-4A*(180)	2.22
PB-4A*(90)	1.11
PB-2R2.375	0.92
PB-3R2.375	1.62
PB-4R2.375	2.32
PD Series Tenons	0.09
PT Series Tenons	0.10
PW-1A3**	0.47
PW-2A3**	0.94
WM-2	0.08
WM-4	0.25

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation

** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Tenons and Brackets (must specify color)	
Square Internal Mount Vertical Tenons (Steel) - Mounts to 3-6" (76-152mm) square aluminum or steel poles PB-1A* – Single PB-4A*(90) – 90° Quad PB-2A* – 180° Twin PB-4A*(180) – 180° Quad PB-3A* – 180° Triple	Round Internal Mount Vertical Tenons (Steel) - Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons PB-2R2.375 – Twin PB-4R2.375 – Quad PB-3R2.375 – Triple
Square Internal Mount Horizontal Tenons (Aluminum) - Mounts to 4" (102mm) square aluminum or steel poles PD-2A4(90) – 90° Twin PD-3A4(90) – 90° Triple PD-2A4(180) – 180° Twin PD-4A4(90) – 90° Quad	Round External Mount Horizontal Tenons (Aluminum) - Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons - Mounts to square pole with PB-1A* tenon PT-1 – Single PT-3(90) – 90° Triple PT-2(90) – 90° Twin PT-4(90) – 90° Quad PT-2(180) – 180° Twin
Wall Mount Brackets - Mounts to wall, roof or side of wood pole WM-2 – Horizontal WM-4 – L-Shape	Mid-Pole Bracket - Mounts to square pole PW-1A3** – Single PW-2A3** – Double