

OSQ Series

OSQ - LED Street/Area Luminaire



CREE LIGHTING

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, 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.

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

Performance Summary

NanoOptic® Precision Delivery Grid™ optic

Efficacy: Up to 150 lm/W

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

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



Ordering Information

Example: OSQ-B-NM-275-A-30K--+24-SV-DIM

OSQ	- B	- NM	- 275	- A	- 30K	- +	- 24	- SV	- DIM							
Product	Version	Mounting	Optic*	Input Power	CCT	Insulation Class	Voltage	Finish	Control Options							
OSQ	B	NM No mount	275 Type II Short	A 103W	30K 3000K	+ Class 1	24 220-240V	SV Silver	DIM Dimmable 1-10V							
			2SH Type II short	K 127W	40K 4000K	+ Class 1	24 220-240V	BK Black	Q Field Adjustable Output							
			2ME Type II Medium	S 208W	57K 5700K			BZ Bronze	RL Rotate left							
			3ME Type III Medium	A 103W	30K 3000K			PB Silver Bronze	RR Rotate right							
			4ME Type IV Medium					WH White	R NEMA® 7-Pin Photocell Receptacle							
			5ME Type V Medium					+ Class 1	24 220-240V	SV Silver	DIM Dimmable 1-10V					
		5SH Type V Short	K 127W	40K 4000K	BK Black							Q Field Adjustable Output				
		15D 15° Flood				S 208W	57K 5700K						BZ Bronze	R NEMA® 7-Pin Photocell Receptacle		
		25D 25° Flood													PB Silver Bronze	7-pin receptacle per ANSI C136.41
		40D 40° Flood														
											Requires photocell or shorting cap by others					

ASYMMETRIC

SYMMETRIC

Ordering information is for reference only. Some product configurations are not available. Please consult spec sheets for specific product availability and for further details.

*Other optics available [WSN(Wide Sign) -60 (60° Flood)-120 (120° Flood)].

Accessory Information

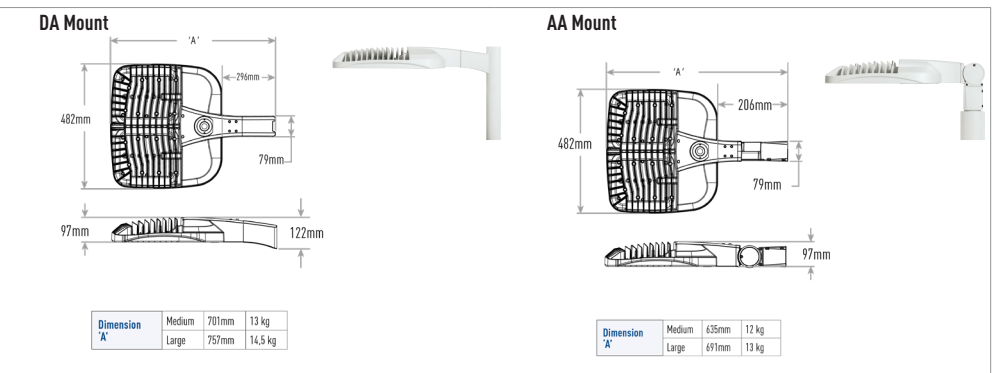
MOUNT (LUMINAIRE MUST BE ORDERED SEPARATELY)

OSQ-AA* Adjustable Arm

OSQ-DA* Direct Arm

* Color options are: **WH** White **BK** Black **SV** Silver
BZ Bronze **PB** Silver Bronze

Dimensions



OSQ Series

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CREE LIGHTING

FEATURES

- Full cut-off optics (NanoOptic® Precision Delivery Grid™)
- Lumen output: 8500 – 31000lm
- System efficacy: Up to 150lm/W
- CCT: 3000K, 4000K, 5700K (CRI Standard min.70); 5000K @Ra90 (On request)
- Initial Colour Consistency: 4 steps MacAdam
- Input Voltage: 220-240V
- Driver equipped with temperature sensor to preserve optimal working conditions
- Power factor: Up to > 0.9 at full load
- L90B10 up to 140,000 hours Ta=25°C (according to IEC/EN62717 and IESNA TM-21) calculated on LM80 report at 22,000 hours
- Surge protection: 10kV CM/DM surge immunity according to EN 61000-4-5 and EN 61547 (Class I SPD equipped with LED signal).
- Operative temperature: -40°C up to +50°C
- Insulation class: Class I
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Cable type H07RN-F (Cable length Up to 10mt)
- Control options: Field Adjustable Output, Dimming 1-10V,
- Fixture assembled without the use of glues, totally dismountable and recyclable
- LED Board equipped with integral ESD and Surge protection

CONSTRUCTION AND MATERIALS

- Die cast, low copper <0,4%, aluminum alloy housing for long weathering and reliability
- Removable tray
- Slim, low profile design minimizes wind load requirements. Integral, weathertight LED driver compartment and high performance heat sink integrated
- Luminaire is designed to mount directly on 60mm tenons or poles through the AA (Adjustable arm) mount option and can be tilted +/-180°, in steps of 2.5°
- The DA (Direct arm) mount option adapts to 76-152mm square or round poles
- 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

WARRANTY AND CERTIFICATIONS

- Limited Warranty: 10 years on Colorfast DeltaGuard® finish / 10 years on luminaire
- CE mark / RoHs compliant
- Certification to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety (Tested IEC/TR62778)
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Compliant to: EN 60598-1; EN 60598-2-3

ELECTRICAL DATA*

Lumen Package	System Watts 220-240V o 120-240V	Total Current @230V, 50Hz
A	103	0.48 A
K	127	0.55
S	208	0.93

* 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
25°C	A / K / S	1.00	0.99	0.97	0.95	0.93
50°C	A / K / S	0.96	0.95	0.93	0.91	0.89

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 According with TM-21 the projected value can be just up to 6x time the test time

WEIGHT AND MAXIMUM WIND AREA

	Lateral Surface Wind Exposed
Medium	0,069 m ²
Large	0,074 m ²

Control Option - Asymmetric Optics

FIELD ADJUSTABLE Q - INPUT POWER "A"						
Setting Code	Lumen Multiplier	Nominal flux (lm)			Power Multiplier	System Watt
		3000K	4000K	5700K		
Q9	1,00	16044	15760	16044	1,00	103
Q8	0,97	15563	15287	15563	0,95	98
Q7	0,92	14760	14499	14760	0,90	93
Q6	0,89	14279	14026	14279	0,87	89
Q5	0,82	13156	12923	13156	0,80	82
Q4	0,76	12193	11978	12193	0,71	73
Q3	0,68	10910	10717	10910	0,64	66
Q2	0,61	9787	9614	9787	0,57	58
Q1	0,55	8824	8668	8824	0,51	52

FIELD ADJUSTABLE Q - INPUT POWER "K"						
Setting Code	Lumen Multiplier	Nominal flux (lm)			Power Multiplier	System Watt
		3000K	4000K	5700K		
Q7	0,92	18234	19040	19383	0,89	122
Q6	0,89	16674	17411	17724	0,86	110
Q5	0,82	15541	16227	16520	0,79	102
Q4	0,76	13561	14161	14416	0,71	88
Q3	0,68	11554	12065	12282	0,63	74
Q2	0,61	9509	9929	10107	0,57	60
Q1	0,55	7785	8129	8275	0,50	49

FIELD ADJUSTABLE Q - INPUT POWER "S"						
Setting Code	Lumen Multiplier	Nominal flux (lm)			Power Multiplier	System Watt
		3000K	4000K	5700K		
Q9	1,00	30186	31520	32088	1,00	208
Q8	0,97	29281	30574	31125	0,95	198
Q7	0,92	27771	28998	29521	0,89	186
Q6	0,89	26866	28053	28558	0,86	180
Q5	0,82	24753	25846	26312	0,79	164
Q4	0,76	22942	23955	24387	0,71	147
Q3	0,68	20527	21434	21820	0,63	132
Q2	0,61	18414	19227	19574	0,57	118
Q1	0,55	16602	17336	17648	0,50	103

Control Option - Symmetric Optics

FIELD ADJUSTABLE Q - INPUT POWER "A"						
Setting Code	Lumen Multiplier	Nominal flux (lm)			Power Multiplier	System Watt
		3000K	4000K	5700K		
Q9	1,00	14863	15520	15800	1,00	103
Q8	0,97	14417	15054	15326	0,95	98
Q7	0,92	13674	14278	14536	0,90	93
Q6	0,89	13228	13813	14062	0,87	89
Q5	0,82	12188	12726	12956	0,80	82
Q4	0,76	11296	11795	12008	0,71	73
Q3	0,68	10107	10554	10744	0,64	66
Q2	0,61	9067	9467	9638	0,57	58
Q1	0,55	8175	8536	8690	0,51	52

FIELD ADJUSTABLE Q - INPUT POWER "K"						
Setting Code	Lumen Multiplier	Nominal flux (lm)			Power Multiplier	System Watt
		3000K	4000K	5700K		
Q7	0,92	17957	18750	19088	0,89	122
Q6	0,89	17371	18139	18465	0,86	110
Q5	0,82	16005	16712	17013	0,79	102
Q4	0,76	14834	15489	15768	0,71	88
Q3	0,68	13272	13859	14108	0,63	74
Q2	0,61	11906	12432	12656	0,57	60
Q1	0,55	10735	11209	11411	0,50	49

FIELD ADJUSTABLE Q - INPUT POWER "S"						
Setting Code	Lumen Multiplier	Nominal flux (lm)			Power Multiplier	System Watt
		3000K	4000K	5700K		
Q9	1,00	29727	31040	31599	1,00	208
Q8	0,97	28835	30109	30651	0,95	198
Q7	0,92	27349	28557	29071	0,89	186
Q6	0,89	26457	27626	28123	0,86	180
Q5	0,82	24376	25453	25911	0,79	164
Q4	0,76	22592	23590	24015	0,71	147
Q3	0,68	20214	21107	21487	0,63	132
Q2	0,61	18133	18934	19275	0,57	118
Q1	0,55	16350	17072	17380	0,50	103

OSQ Series

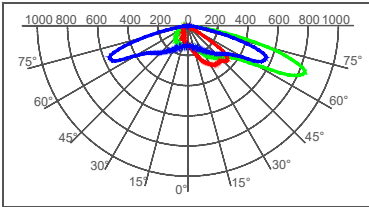
OSQ - LED Street/Area Luminaire



Photometry Asymmetric Optics

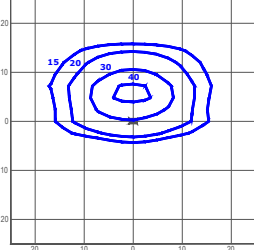
All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified laboratory. To obtain an IES file specific to your project consult: www.creelighting-europe.com

2ME (TM)



cd/klm
 C0 - C180 C90 - C270 C70 - C250

Test Report #: CL1326/20-01S

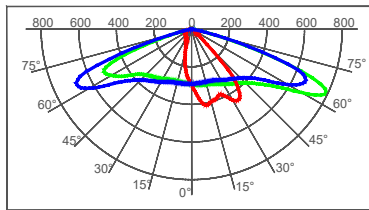


lux
 OSQBNM2MES40K
 Mounting Height: 12m

LUMEN OUTPUT - 2ME Distribution (Type II Medium)			
Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	14079	14701	14590
K	17310	18074	17938
S	28655	29921	29694

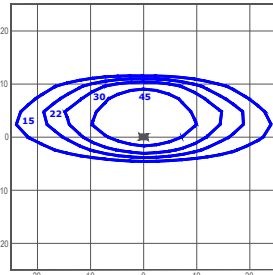
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

275



cd/klm
 C0 - C180 C90 - C270 C70 - C250

Test Report #: CL1326/20-07S

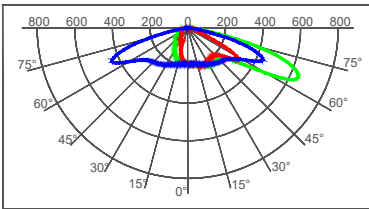


OSQBNM275S40K
 Mounting Height: 12m

LUMEN OUTPUT - 275 Distribution (Type II Short)			
Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	14702	15236	15121
K	18076	18732	18590
S	29923	31009	30775

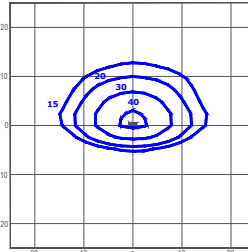
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

3ME (PR)



cd/klm
 C0 - C180 C90 - C270 C70 - C250

Test Report #: CL1326/20-08S

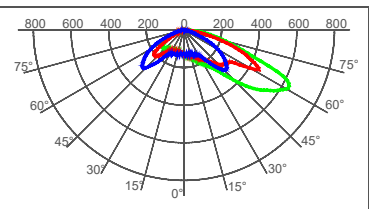


lux
 OSQBNM3MES40K
 Mounting Height: 12m

LUMEN OUTPUT - 3ME Distribution (Type III Medium)			
Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	14042	14551	14441
K	17264	17890	17755
S	28579	29616	29392

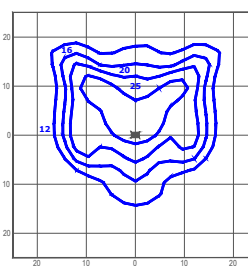
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

4ME (AC)



cd/klm
 C0 - C180 C90 - C270 C70 - C250

Test Report #: CL1326/20-09S



lux
 OSQBNM4MES40K
 Mounting Height: 12m

LUMEN OUTPUT - 4ME Distribution (Type IV Medium)			
Indicatore di potenza	3000K	4000K	5700K
	Lumen emessi*	Lumen emessi*	Lumen emessi*
A	14331	14830	14718
K	17594	18233	18095
S	29126	30183	29995

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

OSQ Series

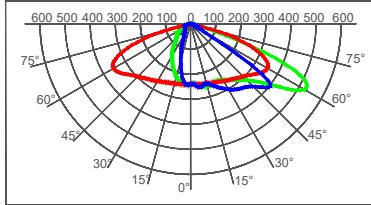
OSQ - LED Street/Area Luminaire



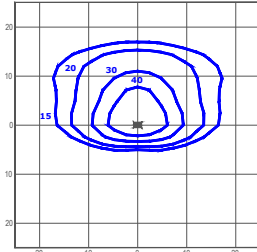
Photometry Asymmetric Optics

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: www.creelighting-europe.com

2SH (Type II Short)



cd/klm
 C0 - C180 C90 - C270 C55 - C235



lux

Test Report #: CL1326/18-47S-SM

OSQBNM2SHS40K
 Mounting Height: 12m

LUMEN OUTPUT - 2SH Distribution (Type II Short)			
Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	13720	14326	14584
K	16576	17308	17620
S	27440	28653	29169

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

OSQ Series

OSQ - LED Street/Area Luminaire

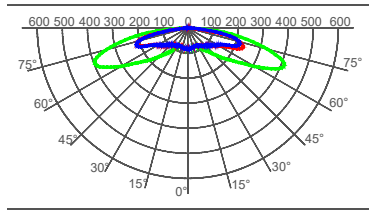


CREE LIGHTING

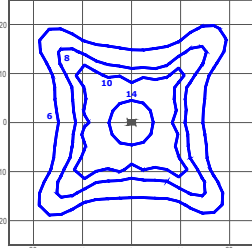
Photometry Asymmetric Optics

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5ME (QVM)



cd/klm
— C0 - C180 — C90 - C270 — C70 - C250



lux
 OSQBNM5MES40K
 Mounting Height: 12m

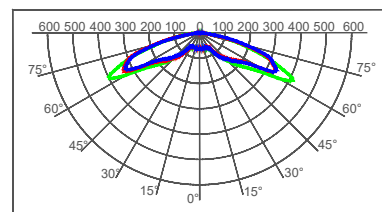
LUMEN OUTPUT - 5ME Distribution (Type IV Medium)

Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	14331	14830	14718
K	17594	18233	18095
S	29126	30183	29995

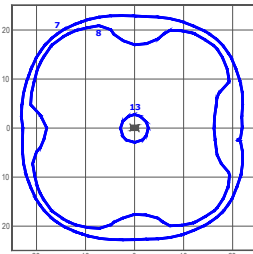
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

Test Report #: CL1326/20-10S

5SH (QVS)



cd/klm
— C0 - C180 — C90 - C270 — C70 - C250



lux
 OSQBNM5SHS40K
 Mounting Height: 12m

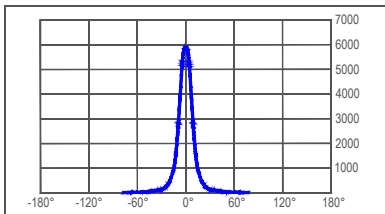
LUMEN OUTPUT - 5SH Distribution (Type V Medium)

Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	13453	13941	14293
K	16082	17343	17781
S	26274	28335	29051

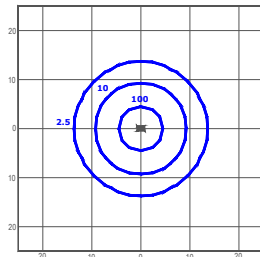
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

Test Report #: CL1326/20-02S

15D



cd/klm
— C90 - C270



lux
 OSQBNM15DS40K
 Mounting Height: 12m

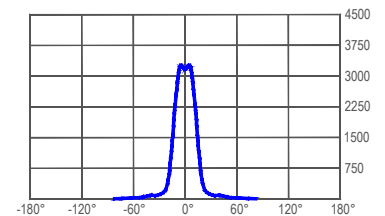
LUMEN OUTPUT - 15D

Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	14222	14850	15118
K	17182	17941	18264
S	28443	29700	30235

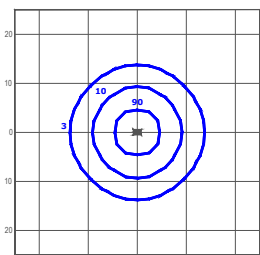
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

Test Report #: CL132620-07S

25D



cd/klm
— C90 - C270



lux
 OSQBNM25DS40K
 Mounting Height: 12m

LUMEN OUTPUT - 25D

Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	14256	14886	15154
K	17223	17984	18308
S	28512	29772	30308

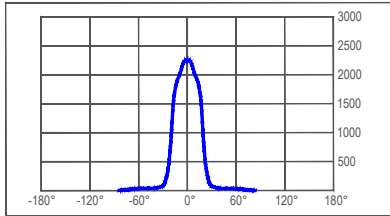
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

Test Report #: CL132620-07S

Photometry Symmetric Optics

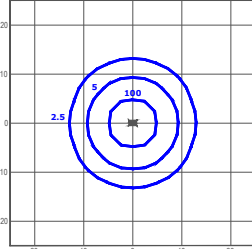
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40D



cd/klm
C90 - C270

Test Report #: CL132620-09S



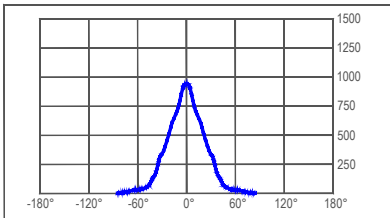
OSQBNM15DS40K
Mounting Height: 12m

LUMEN OUTPUT - 40D

Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	14222	14850	15118
K	17182	17941	18264
S	28443	29700	30235

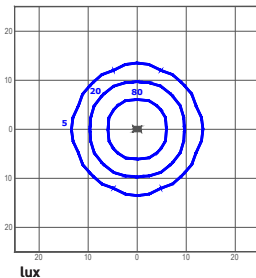
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

60D



cd/klm
C90 - C270

Test Report #: CL132620-10S



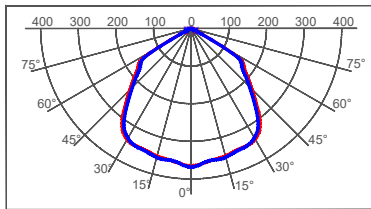
OSQBNM60DS40K
Mounting Height: 12m

LUMEN OUTPUT - 60D

Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	14222	14850	15118
K	17182	17941	18264
S	28443	29700	30235

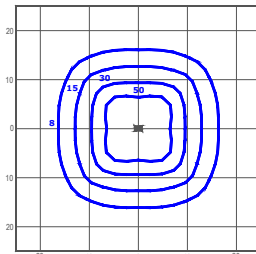
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

120D



cd/klm
C0 - C180 C90 - C270

Test Report #: CL132620-07S



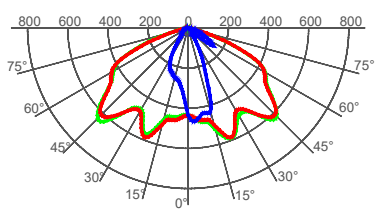
OSQBNM120DS40K
Mounting Height: 12m

LUMEN OUTPUT - 120D

Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	14222	14850	15118
K	17182	17941	18264
S	28443	29700	30235

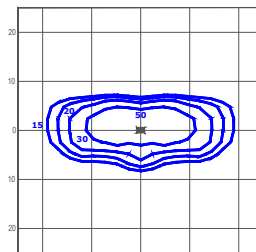
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

WSN - Wide Sign



cd/klm
C0 - C180 C90 - C270 C95 - C275

Test Report #: PL07695-001A



OSQBNMWSNS40K
Mounting Height: 12m

LUMEN OUTPUT -WSN (Wide Sign)

Input Power Designator	3000K	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	14222	14850	15118
K	17182	17941	18264
S	28443	29700	30235

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