

XSP High Output Series

XSPM - LED Street/Area Luminaire

Product Description

Designed from the ground up as a totally optimized LED street lighting system, XSPM maintains the familiar look of the traditional cobrahead design and delivers substantial energy savings while reducing maintenance time and costs. Equipped with our NanoOptic® Precision Delivery Grid™ optic, XSPM achieves better optical control than traditional street lighting fixtures and efficiently delivers white uniform light for safer-feeling communities. The luminaire is designed to mount directly to 76mm or 60mm outer dimension tenons or poles with a specific spigot (adjustable arm).

Applications: Roadway, parking lots, walkways and general area spaces

Performance Summary

NanoOptic® Precision Delivery Grid™ optic

Efficacy: Up to 145 lm/W

CRI: Minimum 70 CRI

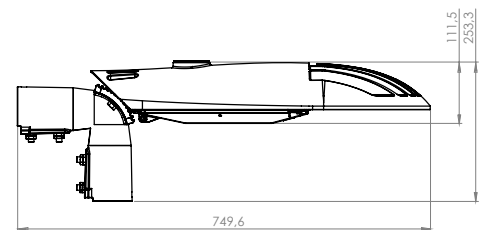
CCT: 3000K; 4000K; 5700K

Initial Colour consistency: 4 MacAdam steps

Limited Warranty*: Class 1 – 10 years on luminaire / 10 years on Colorfast DeltaGuard® finish
Class 2 – 5 years on luminaire / 10 years on Colorfast DeltaGuard® finish

Accessories

Field-Installed	
KIT-XSP-AP60-48-G0 Fitter kit to mount to 48mm tenon	KIT-XSP-AP60-42-G0 Fitter kit to mount to 42mm tenon
KIT-XSP-AP60-34-G0 Fitter kit to mount to 34mm tenon	



Ordering Information

Example: XSPM-E-02-2LG-A-30K+-24-SV-FX-S-00

XSPM	- E	- 02	2LG	- A	- 30K	- +	- 24	- SV	- FX	- S	- 00
Product	Version	Mounting	Optic	Input Power	CCT	Insulation Class	Voltage	Color	Options	Variant	Cable length
XSPM	E	02 horiz/vert tenon 60mm OD	2LG Type II long	A 58W	30K 3000K	+ Class 1 ^ Class 2	24 220-240V	SV Silver	FX* Input Power A: Fixed Input Power	S Standard	00 Standard (w/o cable)
		03 horiz/vert tenon 76mm OD	275 Type II short 0.75	B 41W	40K 4000K			BK Black	Q* Field Adjustable Output	N Nema 7pin longjoin	01 Exit cable 30cm
			210 Type II short 1,0	C 41W	57K 5700K			BZ Bronze	DQ Field Adjustable Output (1-10V)	F** Fuse	03 Exit cable 3m
			2SH Type II short					SB Silver Bronze	Y-Z 1-10V on virtual mid- night reprogrammable		06 Exit cable 6m
			3SH Type III short					WH White	G* Input Power B: Lineswitch		10 Exit cable 10m
			3ME Type III Medium						RF* Flux Regulator		
			4ME Type IV medium						DY DynaDimmer		
									DL DALI		
									CL Constant Lumen Output		
									DC DynaDimmer + CLO		
									CR* Input Power C: Virtual Midnight Chronostep reprogrammable		

* Nema Variant not available as a standard option

** Fuse option available with Standard or Nema configurations (Specify SF or NF)

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



www.cree-europe.com

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Rev. Date: 01 June 2018



Product Specifications

CONSTRUCTION & MATERIALS

- Die cast, low copper <0,01%, aluminum alloy housing w/ UV stabilized polymeric door for long weathering and reliability
- Tool-less entry
- Removable tray
- Luminaire is designed to mount directly to 76mm or 60mm outer dimension tenons or poles and can be tilted +/- 20°, in steps of 5°
- Luminaire fitter 02 can mount to 60mm OD tenons and fitter 03 to 76mm
- Luminaire will also mount to 34-42-48mm outer dimension tenon or pole with an accessory fitter kit
- 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:** 220-240V 50Hz
- Total Harmonic Distortion:** < 10% at full load
- To address inrush current, slow blow fuse or type B/C breaker should be used

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE mark
- ENEC mark
- RoHs compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- Up to 10kV surge immunity according to EN 61000-4-5 and EN 61547
- 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*			
Input Power Designator	System Watts 220-240V	Total Current	Power Factor
		@230V, 50Hz	
A	58	0,26	0,98
B	41	0,18	0,98
C	41	0,17	0,97

* 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
-40°C	A	1.09	1.05	1.02	0.98	0.95
-30°C	A	1.08	1.04	1.01	0.97	0.94
-20°C	A	1.07	1.03	1.00	0.96	0.93
-10°C	A	1.06	1.02	0.99	0.95	0.92
0°C	A	1.05	1.01	0.98	0.94	0.91
5°C	A	1.04	1.00	0.97	0.93	0.90
10°C	A	1.03	0.99	0.96	0.92	0.89
15°C	A	1.02	0.98	0.95	0.91	0.88
20°C	A	1.01	0.97	0.94	0.90	0.87
25°C	A	1.00	0.96	0.93	0.89	0.86
30°C	A	0.99	0.96	0.92	0.88	0.84
40°C	A	0.98	0.94	0.89	0.84	0.80
50°C	A	0.86	0.91	0.83	0.76	0.70

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	
Weight	Lateral Surface Wind Exposed
7 kg	0.08m ²

Available NEMA options		
DQ-N	Nema 7 pin with Field Adj	(on-off + Dim)
Y-N / Z-N	Nema 7 pin with VM Reprog	(on-off)
DL-N	Nema 7 pin with DALI	(on-off + Dim)
DY-N	Nema 7 pin with Dynadimmer	(on-off)
CL-N	Nema 7 pin with CLO	(on-off)
DC-N	Nema 7 pin with Dynadimmer and CLO	(on-off)

- on-off: Nema allows for on-off control only

- on-off + Dim: Nema allows for on-off and dimming control

Control options - Input Power Designator A

Field Adjustable Output - Input Power Designator A					
Setting	System Watts W	Lumen Multipliers	Nominal flux (lm)		
			5700K	4000K	3000K
Q9	58	1,00	7687	7640	7257
Q8	53	0,93	7178	7134	6777
Q7	48	0,87	6671	6630	6298
Q6	43	0,79	6036	5999	5699
Q5	38	0,71	5486	5452	5179
Q4	33	0,62	4766	4737	4500
Q3	27	0,52	3969	3945	3747
Q2	21	0,40	3078	3060	2906
Q1	16	0,29	2211	2197	2087

Virtual Midnight Y/Z - Input Power Designator A								
Setting	System Watts W (High Mode)	Nominal flux (lm)			System Watts W (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K
Y1	58	7687	7640	7257	48	6671	6630	6298
Y2	58	7687	7640	7257	30	4383	4357	4139
Y3	58	7687	7640	7257	17	2390	2376	2257
Y4	45	6290	6252	5939	30	4383	4357	4139
Y5	45	6290	6252	5939	17	2390	2376	2257
Y6	30	4383	4357	4139	17	2390	2376	2257
Z1	51	6924	6882	6538	41	5820	5785	5495
Z2	51	6924	6882	6538	33	4766	4737	4500
Z3	51	6924	6882	6538	20	2887	2870	2726
Z4	41	5820	5785	5495	33	4766	4737	4500
Z5	41	5820	5785	5495	20	2887	2870	2726
Z6	33	4766	4737	4500	20	2887	2870	2726

Dimming 8h

Control options - Input Power Designator B

Dynadimmer - Input Power Designator B									
Setting		System Watts W (High Mode)	Nominal flux (lm)			System Watts W (Low Mode)	Nominal flux (lm)		
			5700K	4000K	3000K		5700K	4000K	3000K
DY8		41	5843	5807	5516	31	4697	4668	4435
DY7		41	5843	5807	5516	21	3340	3320	3154
DY6		41	5843	5807	5516	16	2471	2456	2333
DY5		37	5379	5346	5079	18	2922	2904	2759
DY4		31	4697	4668	4435	21	3340	3320	3154
DY3		31	4697	4668	4435	16	2471	2456	2333
DY2		26	4022	3997	3797	16	2471	2456	2333
DY1		21	3340	3320	3154	16	2471	2456	2333

Lineswitch - Input Power Designator B									
Setting		System Watts W (High Mode)	Nominal flux (lm)			System Watts W (Low Mode)	Nominal flux (lm)		
			5700K	4000K	3000K		5700K	4000K	3000K
L6* / G6		41	5843	5807	5516	21	3340	3320	3154
L5* / G5		37	5379	5346	5079	18	2922	2904	2759
L4* / G4		31	4697	4668	4435	16	2471	2456	2333
L3* / G3		26	4022	3997	3797	14	2222	2209	2098
L2* / G2		23	3576	3554	3376	14	2222	2209	2098
L1* / G1		17	2824	2807	2666	14	2222	2209	2098

* Dimming 6h or 8h

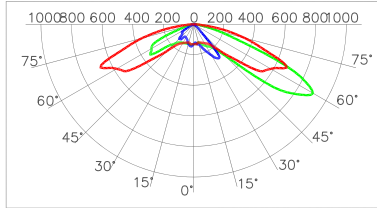
Control options - Input Power Designator C

Chronostep - Input Power Designator C													
Setting		System Watts (High Mode)	Nominal flux (lm)			System Watts (Medium Mode)	Nominal flux (lm)			System Watts (Low Mode)	Nominal flux (lm)		
			5700K	4000K	3000K		5700K	4000K	3000K		5700K	4000K	3000K
8h	6h		5700K	4000K	3000K		5700K	4000K	3000K		5700K	4000K	3000K
CR8	CR16	41	5843	5807	5516					32	4886	4856	4613
CR7	CR15	41	5843	5807	5516					22	3471	3450	3277
CR6	CR14	38	5577	5543	5266					26	3995	3971	3772
CR5	CR13	38	5577	5543	5266					19	3078	3060	2906
CR4	CR12	32	4886	4856	4613					22	3471	3450	3277
CR3	CR11	32	4886	4856	4613					16	2587	2571	2442
CR2	CR10	27	4208	4182	3973					16	2587	2571	2442
CR1	CR9	22	3471	3450	3277					16	2587	2571	2442
CR19		41	5843	5807	5516	32	4886	4856	4613	22	3471	3450	3277
CR18		38	5577	5543	5266	26	3995	3971	3772	19	3078	3060	2906
CR17		32	4886	4856	4613	22	3471	3450	3277	16	2587	2571	2442

Photometry

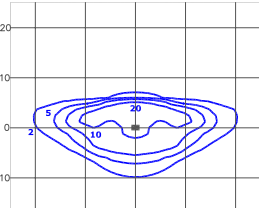
All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified laboratory. To obtain an IES file specific to your project consult: <http://www.cree-europe.com>.

2LG - Type II Long



cd/klm
 C0 - C180 C90 - C270 C15 - C195

Test Report #: PL12371-015A



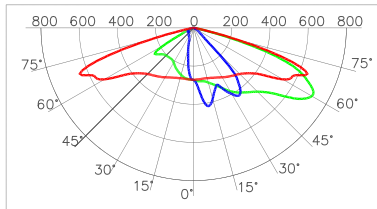
lux

XSPMA022LGA40K
 Mounting Height: 6m

Lumen Output - 2LG (Type II Long)			
Input Power Designator	5700K	4000K	3000K
		Initial Delivered Lumens*	Initial Delivered Lumens*
A	6890	6848	6505
B/C	5238	5206	4945

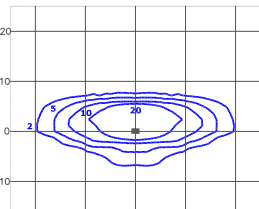
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

275 - Type II Short 0.75



cd/klm
 C0 - C180 C90 - C270 C15 - C195

Test Report #: PL12371-010A



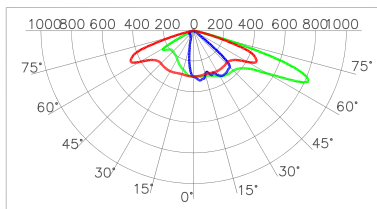
lux

XSPMA02275A40K
 Mounting Height: 6m

Lumen Output - 275 (Type II Short 0.75)			
Input Power Designator	5700K	4000K	3000K
		Initial Delivered Lumens*	Initial Delivered Lumens*
A	7076	7033	6681
B/C	5379	5346	5078

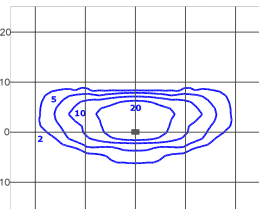
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

210 - Type II Short 1.0



cd/klm
 C0 - C180 C90 - C270 C15 - C195

Test Report #: PL12371-001A



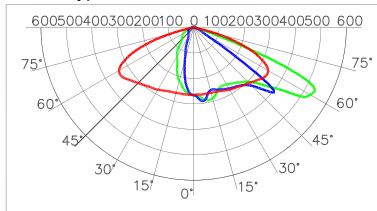
lux

XSPMA02210A40K
 Mounting Height: 6m

Lumen Output - 210 (Type II Short 1.0)			
Input Power Designator	5700K	4000K	3000K
		Initial Delivered Lumens*	Initial Delivered Lumens*
A	7073	7030	6678
B/C	5376	5344	5076

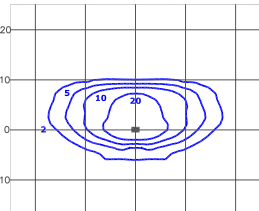
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

2SH - Type II Short



cd/klm
 C0 - C180 C90 - C270 C35 - C215

Test Report #: PL12371-011A



lux

XSPMA022SHA40K
 Mounting Height: 6m

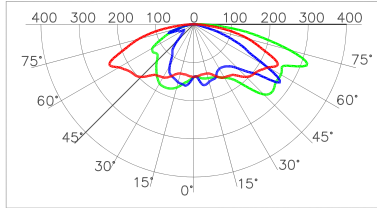
Lumen Output - 2SH (Type II Short)			
Input Power Designator	5700K	4000K	3000K
		Initial Delivered Lumens*	Initial Delivered Lumens*
A	7026	6984	6634
B/C	5341	5309	5043

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

Photometry

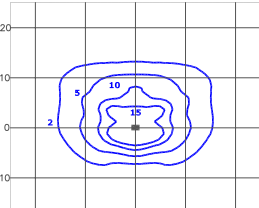
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3SH - Type III Short



cd/klm
 C0 - C180 C90 - C270 C35 - C215

Test Report #: PL12371-012A

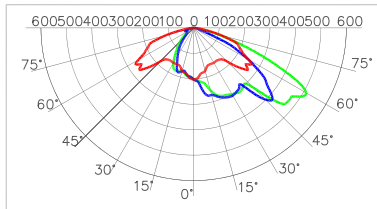


lux
 XSPMA023SHA40K
 Mounting Height: 6m

Lumen Output - 3SH (Type III Short)			
Input Power Designator	5700K	4000K	3000K
		Initial Delivered Lumens*	Initial Delivered Lumens*
A	6717	6676	6342
B/C	5106	5075	4821

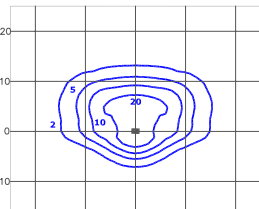
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

3ME - Type III Medium



cd/klm
 C0 - C180 C90 - C270 C45 - C225

Test Report #: PL12371-013A

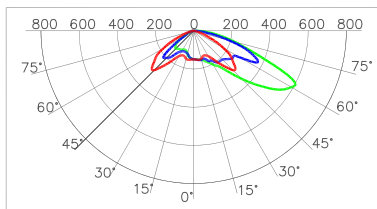


lux
 XSPMA023MEA40K
 Mounting Height: 6m

Lumen Output - 3ME (Type III Medium)			
Input Power Designator	5700K	4000K	3000K
		Initial Delivered Lumens*	Initial Delivered Lumens*
A	6948	6906	6560
B/C	5282	5250	4987

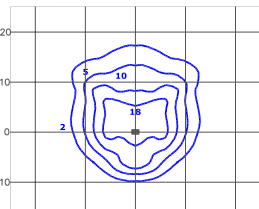
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

4ME - Type IV Medium



cd/klm
 C0 - C180 C90 - C270 C45 - C225

Test Report #: PL12371-014A



lux
 XSPMA024MEA40K
 Mounting Height: 6m

Lumen Output - 4ME (Type IV Medium)			
Input Power Designator	5700K	4000K	3000K
		Initial Delivered Lumens*	Initial Delivered Lumens*
A	7020	6978	6628
B/C	5336	5304	5038

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