

Robust and reliable, the Neos Led 1 & 2 constitute high-performance tools to efficiently and dynamically illuminate façades and monuments

Description

ROBUST, RELIABLE AND HIGH-PERFORMANCE TOOLS TO EFFICIENTLY AND DYNAMICALLY ILLUMINATE FACADES AND MONUMENTS

- ▶ Pole height: 4m - 8m
- ▶ LensoFlex®2 photometric engine with photometry adapted to various applications
- ▶ Adjustable inclination on-site
- ▶ FutureProof: easy replacement of the photometric engine and electronic assembly on-site
- ▶ Dedicated family of bracket and poles
- ▶ Designed to incorporate Owllet range of control solutions: stand-alone (PIR, photocell...), autonomous network and interoperable
- ▶ Surge protection 10kV

Presentation of the selected product

The Neos LED floodlights are available in three sizes:

Neos LED 1 with 16 LED, Neos LED 2 with 32 LED and Neos LED 3 with 64 LED.

In the Neos LED range the energy efficiency of LED technology combines with the photometric performance of the LensoFlex® concept developed by Schröder.

The Neos LED floodlights are composed of a two-piece housing made of painted die-cast aluminium. The protector in glass is sealed onto the cover.

Mounting by means of a fork enables the inclination to be adjusted precisely on-site

Applications: Pedestrian crossings

Recommended height installation: between 4m and 8m

Painting: Polyester powder coating

Colour: RAL 7035

Other colours RAL or AKZO on request

NEOS 2 LED - Your configuration:

Type of distribution:

Reflector: 5145

Protector: Flat, Glass, Smooth

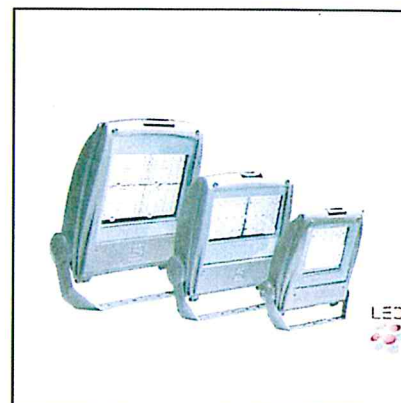
Source: 48 LEDS 500mA CW

Settings: Zebra right - 351912

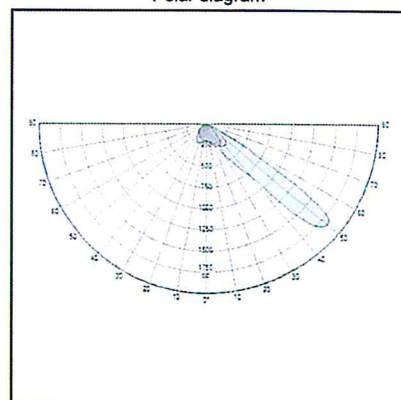
Dimensions: Width: 398 Height: 140 Length: 441 Weight: 8

Mechanical and electrical characteristics: IP: IP 66 IK: IK 08 Electrical Class: Class II EU

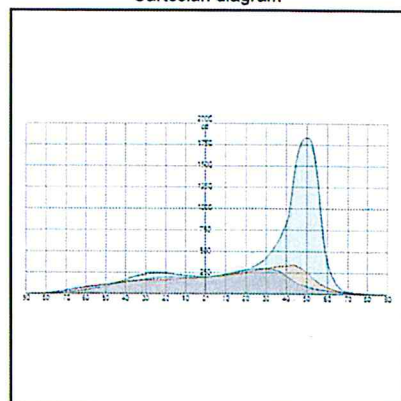
Due to the continuous research and development we undertake on our products, we reserve the right to alter the specifications without notice. As these may present different characteristics according to the requirements of individual countries, we invite you to consult us.



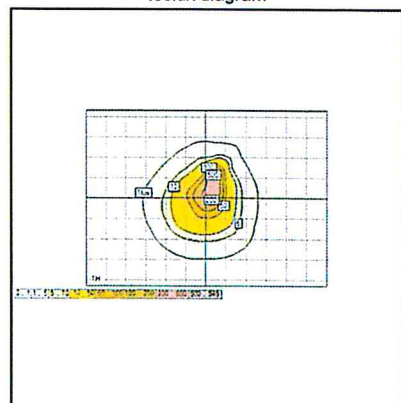
Polar diagram



Cartesian diagram



Isolux diagram



XSP 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 125 LPW

CRI: Minimum 70 CRI

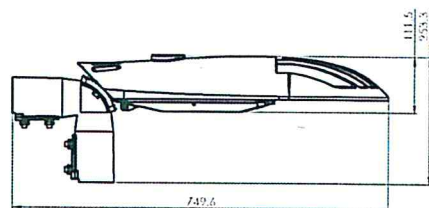
CCT: 3000K; 4000K; 5700K

Initial Colour consistency: 4 steps di MacAdam

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-A-02-2LG-A-30K+24-SV-Y-S-00

XSPM	-	A	-	02	-	2LG	-	A	-	30K	-	+	-	24	-	SV	-	Y	-	S	-	00
Product		Version		Mounting		Optic		Input Power		CCT		Insulation Class		Voltage		Color		Options		Variant		Cable length
XSPM	-	A	-	02 horiz/vert tenon 60mm OD 03 horiz/vert tenon 76mm OD	-	2LG Type II long 275 Type II short 0.75 210 Type II short 1,0 2SH Type II short 3SH Type III short 3ME Type III medium 4ME Type IV medium	-	A 58W B 42W C 42W	-	30K 3000K 40K 4000K 57K 5700K	-	+	-	24 220-240V	-	SV Silver BK Black BZ Bronze SB Silver Bronze WH White	-	<u>Available with Input Power A:</u> FX* Fixed Output Q#* Field Adjustable Output DQ Field Adjustable Dimming Y-Z Virtual Midnight <u>Available with Input Power B:</u> G* Lineswitch RF* Flux regulator DY DynaDimmer DL DALI CL Constant Lumen Output DC DynaDimmer + CLO <u>Available with Input Power C:</u> CR* Virtual Midnight Chronostep	-	S Standard F Fuse N Nema	-	00 Standard (w/o cable) 01 Exit cable 30cm 03 Exit cable 3m 06 Exit cable 6m 10 Exit cable 10m



XSPM - LED Street/Area Luminaire

Product Specifications

CONSTRUCTION & MATERIALS

- Die cast, low copper, 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
- Power Factor: > 0.95 at full load
- 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
- CD certificate
- 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 (W) 220-240V	Total Current (A)	Power factor
		@230V, 50Hz	
A	58	0.26	0.98
B / C	42	0.19	0.98

* 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 six times the test time

Weight and Maximum Wind Area	
Weight	Lateral Surface Wind Exposed
7 kg	0.08m ²

XSPM - LED Street/Area Luminaire

Control options - Input Power Designator A

Field Adjustable Output - Input Power A					
Setting	System Watts W	Lumen Multipliers	Nominal flux (lm)		
Q9 (Factory Set)	58	1,000	5700K	4000K	3000K
Q8	54	0,942	7192	7134	6815
Q7	49	0,874	6777	6723	6422
Q6	44	0,797	6287	6237	5957
Q5	39	0,720	5731	5685	5430
Q4	33	0,625	5178	5137	4907
Q3	28	0,523	4499	4462	4263
Q2	22	0,405	3760	3730	3563
Q1	16	0,286	2916	2892	2763
			2056	2040	1948

Virtual Midnight Y - Input Power 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	7192	7134	7134	49	6287	6237	5957
Y2	58	7192	7134	7134	30	4119	4086	3904
Y3	58	7192	7134	7134	17	2239	2221	2121
Y4	45	5805	5758	5502	30	4119	4086	3904
Y5	45	5805	5758	5502	17	2239	2221	2121
Y6	30	4119	4086	3904	17	2239	2221	2121

Virtual Midnight Z - Input Power A								
Setting	System Watts W (High Mode)	Nominal flux (lm)			System Watts W (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K
Z1	51	6468	6416	6131	41	5303	5261	5026
Z2	51	6468	6416	6131	33	4499	4462	4263
Z3	51	6468	6416	6131	20	2792	2770	2646
Z4	41	5303	5261	5026	33	4499	4462	4263
Z5	41	5303	5261	5026	20	2792	2770	2646
Z6	33	4499	4462	4263	20	2792	2770	2646

XSPM - LED Street/Area Luminaire

Control options - Input Power Designator B

Lineswitch - Input Power B								
Setting	System Watts W (High Mode)	Nominal flux (lm)			System Watts W (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K
G1*	42	5440	5396	5156	22	3248	3222	3078
G2*	38	5074	5033	4808	19	2870	2847	2720
G3*	32	4420	4385	4189	16	2371	2352	2247
G4*	27	3877	3845	3674	14	2011	1994	1905
G5*	24	3527	3499	3343	14	2011	1994	1905
G6*	18	2716	2694	2573	14	2011	1994	1905

* Dimming 6h or 8h

Dynadimmer - Input Power B								
Setting	System Watts W (High Mode)	Nominal flux (lm)			System Watts W (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K
DY1	42	5440	5396	5156	22	3248	3222	3078
DY2	38	5074	5033	4808	19	2870	2847	2720
DY3	32	4420	4385	4189	16	2371	2352	2247
DY4	27	3877	3845	3674	16	2371	2352	2247
DY5	22	3248	3222	3078	16	2371	2352	2247
DY6	42	5440	5396	5156	32	4420	4385	4189
DY7	42	5440	5396	5156	16	2371	2352	2247
DY8	32	4420	4385	4189	22	3248	3222	3078

Control options - Input Power Designator C

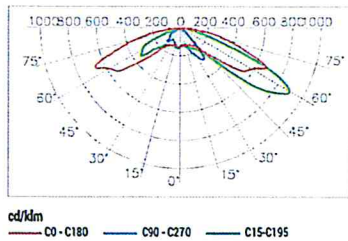
Virtual Midnight Chronostep - Input Power C												
Setting	System Watts W (High Mode)	Nominal flux (lm)			System Watts W (Medium Mode)	Nominal flux (lm)			System Watts W (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K		5700K	4000K	3000K
CR1	41	5440	5396	5156					22	3335	3308	3161
CR2	38	5168	5126	4898					19	2957	2933	2802
CR3	32	4528	4492	4291					16	2466	2446	2337
CR4	27	3968	3936	3760					16	2466	2446	2337
CR5	22	3335	3308	3161					16	2466	2446	2337
CR6	41	5440	5396	5156					32	4528	4492	4291
CR7	38	5168	5126	4898					26	3793	3763	3595
CR8	32	4528	4492	4291					22	3335	3308	3161
CR9	41	5440	5396	5156					22	3335	3308	3161
CR10	38	5168	5126	4898					19	2957	2933	2802
CR11	32	4528	4492	4291					16	2466	2446	2337
CR12	27	3968	3936	3760					16	2466	2446	2337
CR13	22	3335	3308	3161					16	2466	2446	2337
CR14	41	5440	5396	5156					32	4528	4492	4291
CR15	38	5168	5126	4898					26	3793	3763	3595
CR16	32	4528	4492	4291					22	3335	3308	3161
CR17	41	5440	5396	5156	32	4528	4492	4291	22	3335	3308	3161
CR18	38	5168	5126	4898	26	3793	3763	3595	19	2957	2933	2802
CR19	32	4528	4492	4291	22	3335	3308	3161	16	2466	2446	2337

XSPM - LED Street/Area Luminaire

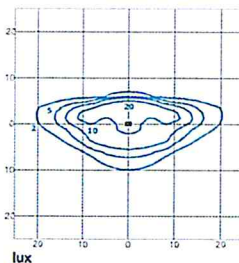
Photometry

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:

2LG - Type II Long



Test Report #: PL11400-001

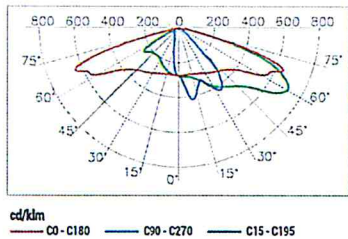


XSPMA022LGA40K
Mounting Height: 6m

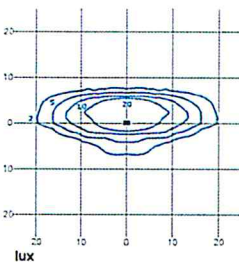
Lumen Output - 2LG (Type II Long)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	5876	5829	5568
B / C	4444	4409	4212

* 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



Test Report #: PL11400-006

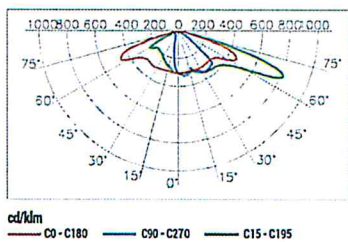


XSPMA02275A40K
Mounting Height: 6m

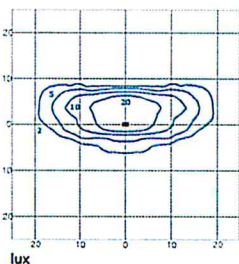
Lumen Output - 275 (Type II Short 0.75)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	6566	6513	6221
B / C	4966	4926	4707

* 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



Test Report #: PL11400-005

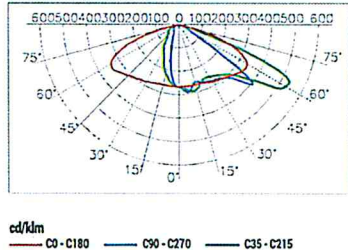


XSPMA02210A40K
Mounting Height: 6m

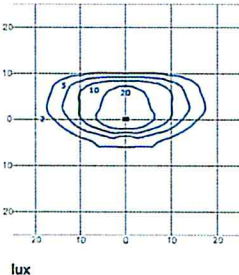
Lumen Output - 210 (Type II Short 1.0)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	6557	6504	6213
B / C	4960	4920	4701

* 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



Test Report #: PL11400-007



XSPMA022SHA40K
Mounting Height: 6m

Lumen Output - 2SH (Type II Short)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	6199	6149	5874
B / C	4689	4651	4444

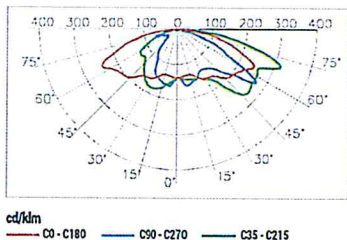
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

XSPM - LED Street/Area Luminaire

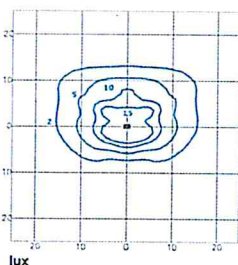
Photometry

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:

3SH - Type III Short



Test Report #: PL11400-004



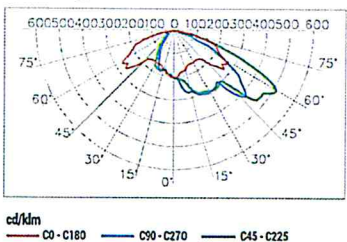
XSPMA023SHA40K
Mounting Height: 6m

Lumen Output - 3SH (Type III Short)

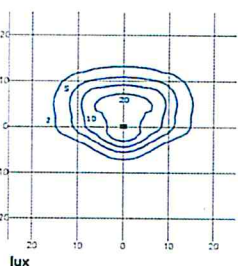
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	5637	5592	5342
B / C	4264	4229	4041

* 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



Test Report #: PL11400-002



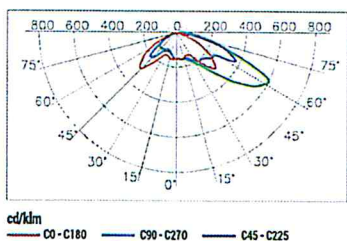
XSPMA023MEA40K
Mounting Height: 6m

Lumen Output - 3ME (Type III Medium)

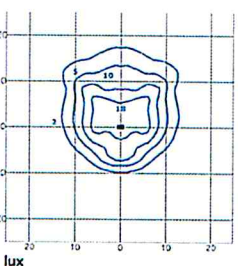
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	6388	6336	6053
B / C	4831	4792	4579

* 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



Test Report #: PL11400-003



XSPMA024MEA40K
Mounting Height: 6m

Lumen Output - 4ME (Type IV Medium)

Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	6429	6377	6092
B / C	4863	4823	4609

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

XSP High Output Series

XSP1™ High Output LED Street/Area Luminaire - Single Module

Product Description

Designed from the ground up as a totally optimized LED street and area lighting system, the XSP High Output Series delivers incredible efficiency without sacrificing application performance. Beyond substantial energy savings and reduced maintenance, Cree achieves greater optical control with our NanoOptic® Precision Delivery Grid™ optic when compared to traditional cobra head luminaires. The XSP High Output Series is the better alternative for traditional street and area lighting with quick payback and improved performance.

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

Performance Summary

NanoOptic® Precision Delivery Grid™ optic

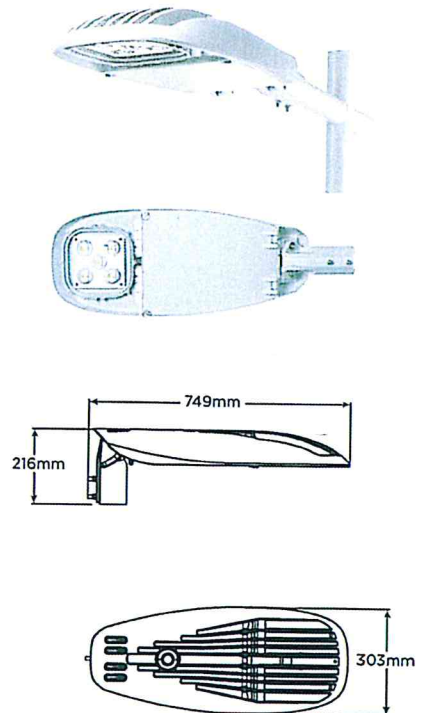
CRI: Minimum 70 CRI

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

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: XSPD022LGE30K+24SVQ901

XSP	D	02	2LG	E	30K	+	24	SV	Q9	01
Product	Version	Mounting	Optic	Input Power Designator	CCT	Insulation Class	Voltage	Color Options	Options	Cable length**
XSP	D	02 horiz/vert tenon 60mm OD 03 horiz/vert tenon 76mm OD	2LG Type II Long 275 Type II Short 0.75 210 Type II Short 1.0 2SH Type II Short 3SH Type III Short 3ME Type III Medium 4ME Type IV Medium	E 98W H 67W	30K 3000K 40K 4000K 57K 5700K	+ Class 1 ^ Class 2	24 220-240V	SV Silver BK Black BZ Bronze SB Silver Bronze WH White	No code Fixed Output <u>Available with Input Power E:</u> Q# Field Adjustable Output - Requires no additional wiring Y# - Z# Virtual Midnight - Field programmable NEM Nema 7 pin + DIM 1-10V NQ# Nema 7 pin + Q# option NY# Nema 7 pin + Y# option NZ# Nema 7 pin + Z# option <u>Available with Input Power H:</u> G# Lineswitch L# Lumistep DL DALI RF#* Flux Regulator CLO Constant Lumen Output DY# DynaDimmer DCL DynaDimmer + CLO NDL Nema 7 pin + DALI NCL Nema 7 pin + CLO NDC Nema 7 pin + DALI + CLO	No code Standard (w/o cable) 01 Exit cable 30cm 03 Exit cable 3m 06 Exit cable 6m 10 Exit cable 10m 12 Exit cable 12m

* Programming on request

** w/o connector

XSP1™ High Output LED Street/Area Luminaire - Single Module

Product Specifications

CONSTRUCTION & MATERIALS

- Die cast aluminum housing
- Tool-less entry
- 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. Standard is Silver. Black, Bronze, Silver Bronze and White are also available

ELECTRICAL SYSTEM

- Input Voltage: 220-240V, 50/60Hz
- Power Factor: > 0.95 at full load
- Total Harmonic Distortion: < 10% at full load
- Surge suppression protection standard up to integral 10kV
- To address inrush current, slow blow fuse or type B/C breaker should be used

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE Listed
- ENEC Listed
- RoHS compliant
- Risk group exempt in accordance with Standard CEI EN 62471 for photobiological safety
- Enclosure rated IP66 per IEC 60529
- Impact resistance IK08
- 10kV surge suppression protection tested in accordance with EN 61000-4-5
- 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	
E	98	0.44	0.96
H	67	0.30	0.99

* Electrical data at 25°C (77°F)

Recommended Cree® XSP H0 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	E	1.04	0.97	0.95	0.92	0.89
	H	1.04	0.99	0.97	0.94	0.91
10°C	E	1.03	0.97	0.95	0.92	0.89
	H	1.04	0.98	0.96	0.93	0.90
15°C	E	1.02	0.97	0.94	0.91	0.89
	H	1.04	0.98	0.96	0.93	0.90
20°C	E	1.01	0.96	0.93	0.90	0.87
	H	1.04	0.97	0.95	0.92	0.89
25°C	E	1.00	0.96	0.92	0.88	0.85
	H	1.04	0.97	0.95	0.92	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 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)

Weight and Maximum Wind Area	
Weight	Lateral Surface Wind Exposed
10.5 kg	0.090m ²

XSP1™ High Output LED Street/Area Luminaire - Single Module

Control options

Field Adjustable Output - Input Power Designator E					
Setting	System Watts	Lumen Multipliers	Nominal flux (lm)		
			5700K	4000K	3000K
Q9	98	1.00	12336	12100	11483
Q8	94	0.97	11944	11715	11118
Q7	90	0.93	11473	11253	10679
Q6	85	0.90	11103	10890	10335
Q5	78	0.84	10363	10164	9646
Q4	71	0.79	9746	9559	9072
Q3	63	0.72	8882	8712	8268
Q2	56	0.66	8142	7986	7579
Q1	49	0.59	7278	7139	6775

Lumistep / Lineswitch - Input Power Designator H								
Setting	System Watts (High Mode)	Nominal flux (lm)			System Watts (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K
L6* / G6	67	8541	8377	7950	34	4436	4351	4129
L5* / G5	59	7829	7679	7288	30	4066	3988	3785
L4* / G4	53	6999	6864	6515	27	3635	3565	3384
L3* / G3	45	5893	5780	5486	22	3061	3002	2849
L2* / G2	37	4783	4691	4452	22	3061	3002	2849
L1* / G1	29	3843	3770	3578	22	3061	3002	2849

* Dimming 6h or 8h

Virtual Midnight Y - Input Power Designator E								
Setting	System Watts (High Mode)	Nominal flux (lm)			System Watts (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K
Y1	98	12336	12100	11483	74	10010	9818	9318
Y2	98	12336	12100	11483	49	7278	7139	6775
Y3	98	12336	12100	11483	25	3655	3585	3402
Y4	74	10010	9818	9318	49	7278	7139	6775
Y5	74	10010	9818	9318	25	3655	3585	3402
Y6	49	7278	7139	6775	25	3655	3585	3402

Virtual Midnight Z - Input Power Designator E								
Setting	System Watts (High Mode)	Nominal flux (lm)			System Watts (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K
Z1	85	11103	10890	10335	68	9422	9241	8770
Z2	85	11103	10890	10335	54	7895	7744	7349
Z3	85	11103	10890	10335	34	4971	4876	4627
Z4	68	9422	9241	8770	54	7895	7744	7349
Z5	68	9422	9241	8770	34	4971	4876	4627
Z6	54	7895	7744	7349	34	4971	4876	4627

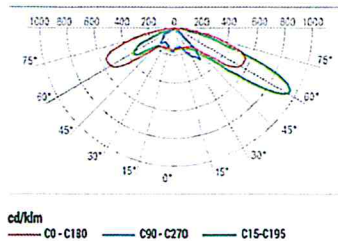
Dynadimmer - Input Power Designator H												
Setting	System Watts (High Mode)	Nominal flux (lm)			System Watts (Medium Mode)	Nominal flux (lm)			System Watts (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K		5700K	4000K	3000K
DY6	67	8541	8377	7950	50	6429	6306	5984	34	4436	4351	4129
DY5	59	7829	7679	7288	45	5893	5780	5486	30	4066	3988	3785
DY4	53	6999	6864	6515	40	5268	5167	4904	27	3635	3565	3384
DY3	45	5893	5780	5489	34	4436	4351	4129	22	3061	3002	2849
DY2	37	4783	4691	4452	28	3683	3612	3428	22	3061	3002	2849
DY1	29	3843	3770	3578	22	3061	3002	2849	22	3061	3002	2849

XSP1™ High Output LED Street/Area Luminaire - Single Module

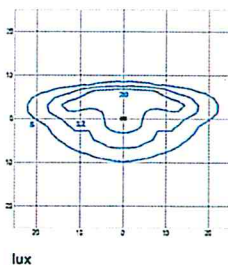
Photometry

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:

2LG - Type II Long



Test Report #: PL09478-001

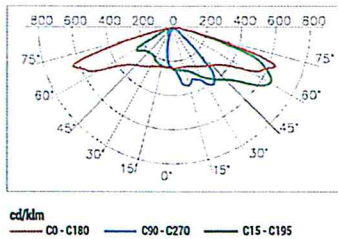


XSPD022LGE40K
Mounting Height: 8m

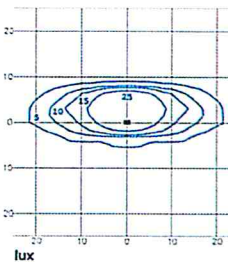
Lumen Output - 2LG (Type II Long)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
E	10950	10740	10193
H	7581	7435	7056

* 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



Test Report #: PL11096-008

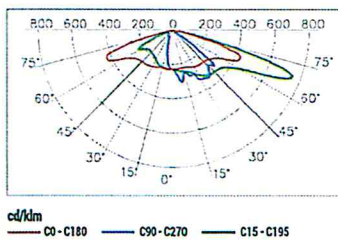


XSPD02275E40K
Mounting Height: 8m

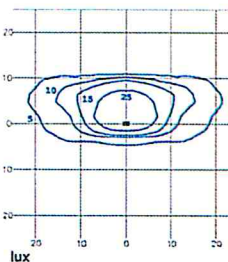
Lumen Output - 275 (Type II Short 0.75)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
E	10784	10577	10038
H	7466	7323	6949

* 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



Test Report #: PL11096-007

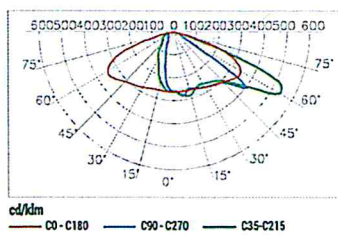


XSPD02210E40K
Mounting Height: 8m

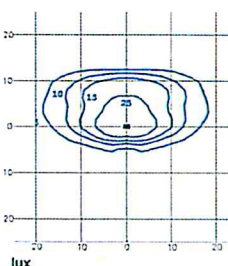
Lumen Output - 210 (Type II Short 1.0)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
E	10801	10594	10054
H	7478	7334	6961

* 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



Test Report #: PL11096-006



XSPD022SHE40K
Mounting Height: 8m

Lumen Output - 2SH (Type II Short)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
E	10813	10606	10065
H	7486	7343	6968

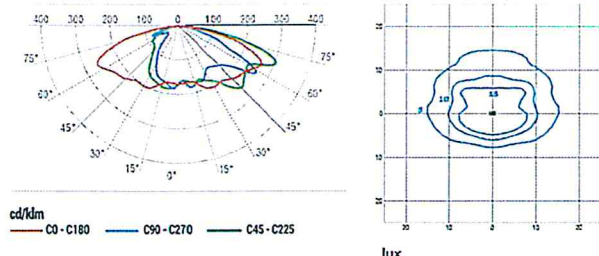
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

XSP1™ High Output LED Street/Area Luminaire - Single Module

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:

3SH - Type III Short



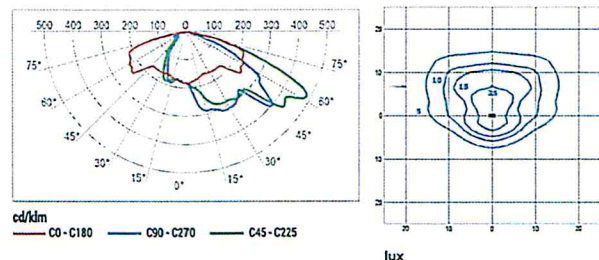
Test Report #: PL09478-002

XSPD023SHE40K
Mounting Height: 8m

Lumen Output - 3SH (Type III Short)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
E	10329	10131	9615
H	7151	7014	6657

* 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



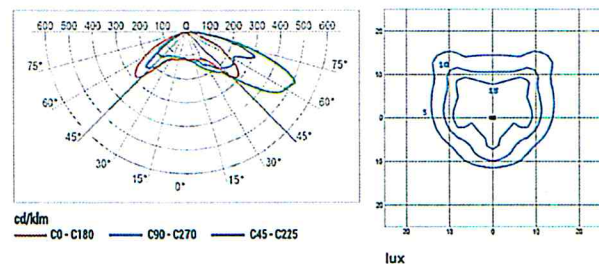
Test Report #: PL10065-003

XSPD023MEE40K
Mounting Height: 8m

Lumen Output - 3ME (Type III Medium)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
E	10838	10630	10088
H	7503	7359	6984

* 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



Test Report #: PL10065-004

XSPD024MEE40K
Mounting Height: 8m

Lumen Output - 4ME (Type IV Medium)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
E	11011	10800	10250
H	7623	7477	7096

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

XSP 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 125 LPW

CRI: Minimum 70 CRI

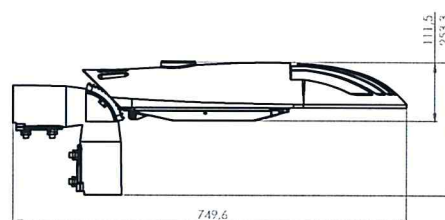
CCT: 3000K; 4000K; 5700K

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-A-02-2LG-A-30K+-24-SV-Y-S-00												
XSPM	- A	- 02	- 2LG	- A	- 30K	- +	- 24	- SV	- Y	- S	- 00	
Product	Version	Mounting	Optic	Input Power	CCT	Insulation Class	Voltage	Color	Options	Variant	Cable length	
XSPM	A	02 horiz/vert tenon 60mm OD 03 horiz/vert tenon 76mm OD	2LG Type II long 275 Type II short 0.75 210 Type II short 1.0 2SH Type II short 3SH Type III short 3ME Type III medium 4ME Type IV medium	A 58W B 42W C 42W	30K 3000K 40K 4000K 57K 5700K	+ Class 1 ^ Class 2	24 220-240V	SV Silver BK Black BZ Bronze SB Silver Bronze WH White	Available with Input Power A: FX* Fixed Output Q#* Field Adjustable Output DQ Field Adjustable Dimming Y-Z Virtual Midnight Available with Input Power B: G* Lineswitch RF* Flux regulator DY DynaDimmer DL DALI CL Constant Lumen Output DC DynaDimmer + CLO Available with Input Power C: CR* Virtual Midnight Chronostep	S Standard F Fuse N Nema	00 Standard (w/o cable) 01 Exit cable 30cm 03 Exit cable 3m 06 Exit cable 6m 10 Exit cable 10m	



XSPM - LED Street/Area Luminaire

Product Specifications

CONSTRUCTION & MATERIALS

- Die cast, low copper, 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
- **Power Factor:** > 0.95 at full load
- **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 (W) 220-240V	Total Current (A)	Power factor
		@230V, 50Hz	
A	58	0.26	0.98
B / C	42	0.19	0.98

* 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

XSPM - LED Street/Area Luminaire

Control options - Input Power Designator A

Field Adjustable Output - Input Power A					
Setting	System Watts W	Lumen Multipliers	Nominal flux (lm)		
			5700K	4000K	3000K
Q9 (Factory Set)	58	1,000	7192	7134	6815
Q8	54	0,942	6777	6723	6422
Q7	49	0,874	6287	6237	5957
Q6	44	0,797	5731	5685	5430
Q5	39	0,720	5178	5137	4907
Q4	33	0,625	4499	4462	4263
Q3	28	0,523	3760	3730	3563
Q2	22	0,405	2916	2892	2763
Q1	16	0,286	2056	2040	1948

Virtual Midnight Y - Input Power 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	7192	7134	7134	49	6287	6237	5957
Y2	58	7192	7134	7134	30	4119	4086	3904
Y3	58	7192	7134	7134	17	2239	2221	2121
Y4	45	5805	5758	5502	30	4119	4086	3904
Y5	45	5805	5758	5502	17	2239	2221	2121
Y6	30	4119	4086	3904	17	2239	2221	2121

Virtual Midnight Z - Input Power A								
Setting	System Watts W (High Mode)	Nominal flux (lm)			System Watts W (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K
Z1	51	6468	6416	6131	41	5303	5261	5026
Z2	51	6468	6416	6131	33	4499	4462	4263
Z3	51	6468	6416	6131	20	2792	2770	2646
Z4	41	5303	5261	5026	33	4499	4462	4263
Z5	41	5303	5261	5026	20	2792	2770	2646
Z6	33	4499	4462	4263	20	2792	2770	2646

XSPM - LED Street/Area Luminaire

Control options - Input Power Designator B

Lineswitch - Input Power B								
Setting	System Watts W (High Mode)	Nominal flux (lm)			System Watts W (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K
G1	42	5440	5396	5156	22	3248	3222	3078
G2	38	5074	5033	4808	19	2870	2847	2720
G3	32	4420	4385	4189	16	2371	2352	2247
G4	27	3877	3845	3674	14	2011	1994	1905
G5	24	3527	3499	3343	14	2011	1994	1905
G6	18	2716	2694	2573	14	2011	1994	1905

Dynadimmer - Input Power B								
Setting	System Watts W (High Mode)	Nominal flux (lm)			System Watts W (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K
DY1	42	5440	5396	5156	22	3248	3222	3078
DY2	38	5074	5033	4808	19	2870	2847	2720
DY3	32	4420	4385	4189	16	2371	2352	2247
DY4	27	3877	3845	3674	16	2371	2352	2247
DY5	22	3248	3222	3078	16	2371	2352	2247
DY6	42	5440	5396	5156	32	4420	4385	4189
DY7	42	5440	5396	5156	16	2371	2352	2247
DY8	32	4420	4385	4189	22	3248	3222	3078

Control options - Input Power Designator C

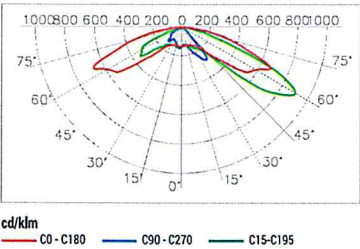
Vital Midnight Chronostep - Input Power C												
Setting	System Watts W (High Mode)	Nominal flux (lm)			System Watts W (Medium Mode)	Nominal flux (lm)			System Watts W (Low Mode)	Nominal flux (lm)		
		5700K	4000K	3000K		5700K	4000K	3000K		5700K	4000K	3000K
CR1 (h22-06)	41	5440	5396	5156					22	3335	3308	3161
CR2 (h22-06)	38	5168	5126	4898					19	2957	2933	2802
CR3 (h22-06)	32	4528	4492	4291					16	2466	2446	2337
CR4 (h22-06)	27	3968	3936	3760					16	2466	2446	2337
CR5 (h22-06)	22	3335	3308	3161					16	2466	2446	2337
CR6 (h22-06)	41	5440	5396	5156					32	4528	4492	4291
CR7 (h22-06)	38	5168	5126	4898					26	3793	3763	3595
CR8 (h22-06)	32	4528	4492	4291					22	3335	3308	3161
CR9 (h24-06)	41	5440	5396	5156					22	3335	3308	3161
CR10 (h24-06)	38	5168	5126	4898					19	2957	2933	2802
CR11 (h24-06)	32	4528	4492	4291					16	2466	2446	2337
CR12 (h24-06)	27	3968	3936	3760					16	2466	2446	2337
CR13 (h24-06)	22	3335	3308	3161					16	2466	2446	2337
CR14 (h24-06)	41	5440	5396	5156					32	4528	4492	4291
CR15 (h24-06)	38	5168	5126	4898					26	3793	3763	3595
CR16 (h24-06)	32	4528	4492	4291					22	3335	3308	3161
CR17 (h22-24-6)	41	5440	5396	5156	32	4528	4492	4291	22	3335	3308	3161
CR18 (h22-24-6)	38	5168	5126	4898	26	3793	3763	3595	19	2957	2933	2802
CR19 (h22-24-6)	32	4528	4492	4291	22	3335	3308	3161	16	2466	2446	2337

XSPM - LED Street/Area Luminaire

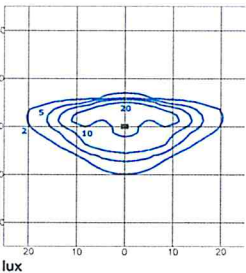
Photometry

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:

2LG - Type II Long



Test Report #: PL11400-001

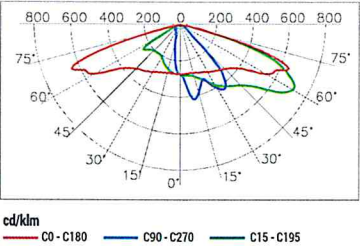


XSPMA022LGA40K
Mounting Height: 6m

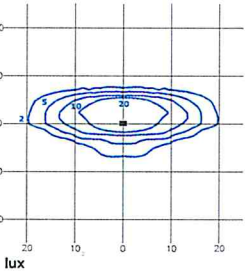
Lumen Output - 2LG (Type II Long)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	5876	5829	5568
B / C	4444	4409	4212

* 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



Test Report #: PL11400-006

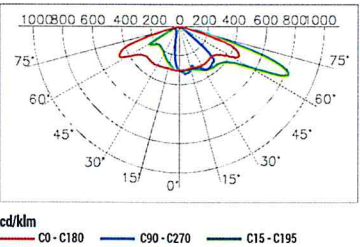


XSPMA02275A40K
Mounting Height: 6m

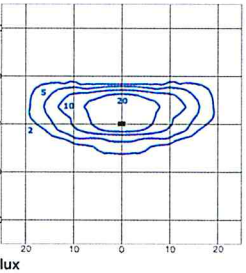
Lumen Output - 275 (Type II Short 0.75)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	6566	6513	6221
B / C	4966	4926	4707

* 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



Test Report #: PL11400-005

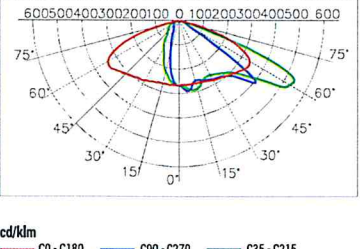


XSPMA02210A40K
Mounting Height: 6m

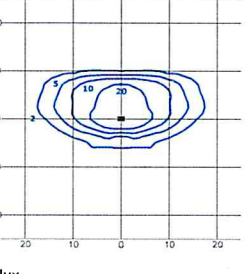
Lumen Output - 210 (Type II Short 1.0)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	6557	6504	6213
B / C	4960	4920	4701

* 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



Test Report #: PL11400-005



XSPMA02210A40K
Mounting Height: 6m

Lumen Output - 2SH (Type II Short)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	6199	6149	5874
B / C	4689	4651	4444

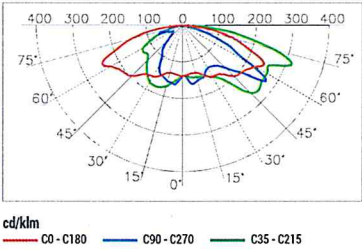
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -4 and +10% of initial delivered lumens

XSPM - LED Street/Area Luminaire

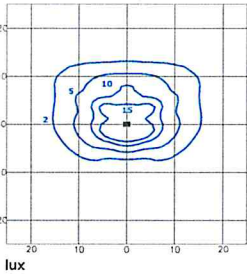
Photometry

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:

3SH - Type III Short



Test Report #: PL11400-004

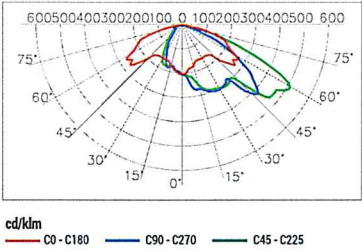


XSPMA023SHA40K
Mounting Height: 6m

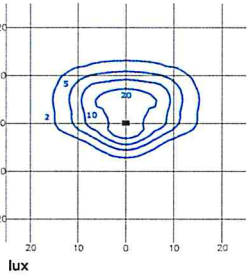
Lumen Output - 3SH (Type III Short)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	5637	5592	5342
B / C	4264	4229	4041

* 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



Test Report #: PL11400-002

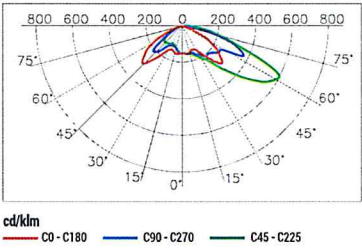


XSPMA023MEA40K
Mounting Height: 6m

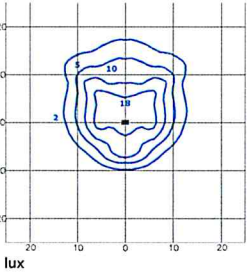
Lumen Output - 3ME (Type III Medium)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	6388	6336	6053
B / C	4831	4792	4579

* 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



Test Report #: PL11400-003

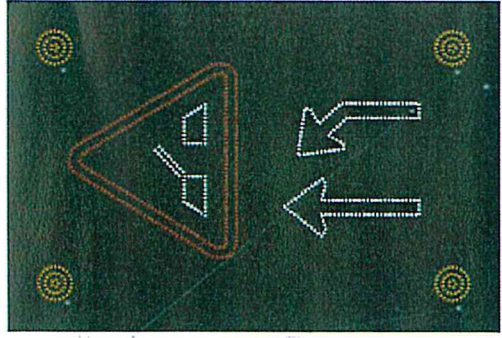


XSPMA024MEA40K
Mounting Height: 6m

Lumen Output - 4ME (Type IV Medium)			
Input Power Designator	5700K	4000K	3000K
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
A	6429	6377	6092
B / C	4863	4823	4609

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

1050 mm



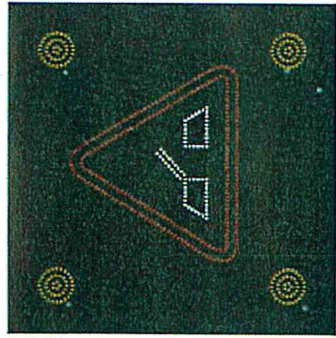
Flashing Elements:
4 yellow(amber) dots,
white arrow pointed left,
Flash frequency = 0.5 Hz

LEDs:
Yellow (Amber): 180 pcs
White: 236 pcs
Red: 261 pcs
Total: 677 pcs

Brightness control:
depending ambient light
controlled by internal luxmeter

matrix door
AlVAg3 15µm anodized
and matt black lacquered

1050 mm



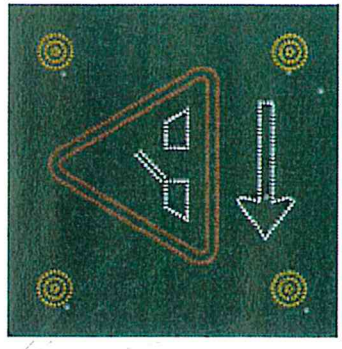
Flashing Elements:
4 yellow(amber) dots,
Flash frequency = 0.5 Hz

LEDs:
Yellow (Amber): 180 pcs
White: 70 pcs
Red: 261 pcs
Total: 511 pcs

Brightness control:
depending ambient light
controlled by internal luxmeter

matrix door
AlVAg3 15µm anodized
and matt black lacquered

1000 mm



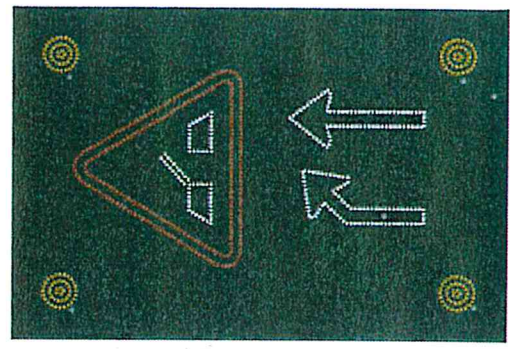
Flashing Elements:
4 yellow(amber) dots,
white arrow pointed left,
Flash frequency = 0.5 Hz

LEDs:
Yellow (Amber): 180 pcs
White: 151 pcs
Red: 261 pcs
Total: 592 pcs

Brightness control:
depending ambient light
controlled by internal luxmeter

matrix door
AlVAg3 15µm anodized
and matt black lacquered

1000 mm



Flashing Elements:
4 yellow(amber) dots,
white arrow pointed left,
Flash frequency = 0.5 Hz

LEDs:
Yellow (Amber): 180 pcs
White: 236 pcs
Red: 261 pcs
Total: 677 pcs

Brightness control:
depending ambient light
controlled by internal luxmeter

matrix door
AlVAg3 15µm anodized
and matt black lacquered



Flashing Elements:

Flash frequency = 0.5 Hz.

LEDs:

Yellow (Amber): 180 pcs
White: 236 pcs
Red: 261 pcs
Total: 677 pcs

Brightness control:

depending ambient light
controlled by internal luxmeter