

XSP Series

XSP2™ LED Street/Area Luminaire – Double Module – Version C

WISDOT B
BXSPC9064&
BXSP-C-HT-3ME-F-40K-UL-SV-Q6-R

Product Description

Designed from the ground up as a totally optimized LED street and area lighting system, the XSP 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 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

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

CRI: Minimum 70 CRI

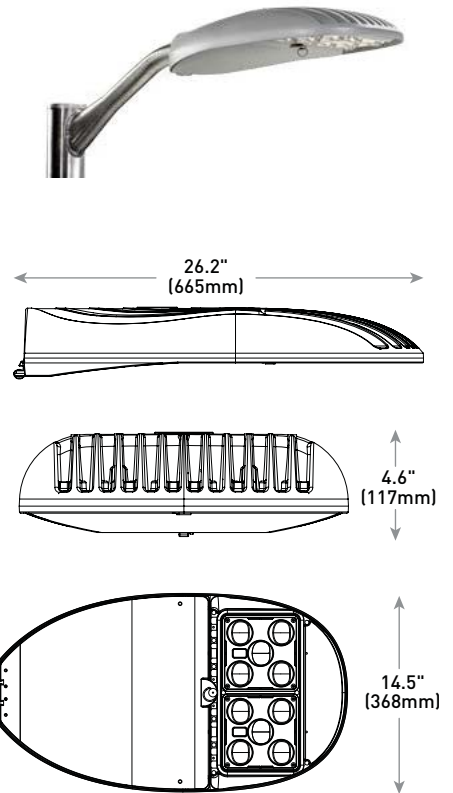
CCT: 3000K (+/- 300K); 4000K (+/- 300K); 5700K (+/- 500K)

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

*See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed	
Backlight Control Shield XA-SP2BLS - Provides 1/2 mounting height cutoff	Bird Spikes XA-SP2BRDSPK



Weight

24 lbs. (11kg)

Item number BXSPC9064&
indicates with WISDOT B label

Ordering Information

Example: BXSP-C-HT-2ME-F-30K-UL-SV

BXSP	C	HT	3ME	F	40K	UL	SV	Q6-R
Product	Version	Mounting	Optic	Input Power Designator	CCT	Voltage	Color Options	Options
BXSP	C	HT Horizontal Tenon	2LG* Type II Long 2ME* Type II Medium 3ME* Type III Medium 4ME* Type IV Medium	F 139W	30K 3000K 40K 4000K 57K 5700K	UL Universal 120-277V UH Universal 347-480V	BK Black BZ Bronze SV Silver WH White	G Small Four Point Mounting - Mounts to 1.25" (32mm) IP, 1.66" (42mm) O.D. horizontal tenon J Large Four Point Mounting - Mounts to 2" (51mm) IP, 2.375" (60mm) O.D. horizontal tenon N-Q9/Q8/Q7/Q6/Q5/Q4 Utility Label, NEMA® 7-Pin Photocell Receptacle & Field Adjustable Output - Must select Q9, Q8, Q7, Q6, Q5 or Q4 - Settings Q3-Q1 are not available with N option - External wattage label per ANSI C136.15 based on Q setting selected - 7-pin receptacle per ANSI C136.41 - Factory connected 0-10V dim leads - Photocell and shorting cap by others - Power/lumens may only be adjusted down in the field - Refer to page 6 for power and lumen values Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1 Field Adjustable Output - Must select Q9, Q8, Q7, Q6, Q5, Q4, Q3, Q2, or Q1 - Power/lumens are fully adjustable in the field - Refer to page 6 for power and lumen values R NEMA® 7-Pin Photocell Receptacle - 7-pin receptacle per ANSI C136.41 - Factory connected 0-10V dim leads - Photocell and shorting cap by others UTL Utility Label - Includes exterior wattage label per ANSI C136.15 that indicates the maximum available wattage of the luminaire

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



US: lighting.cree.com



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



Rev. Date: V7 10/19/2017

Canada: www.cree.com/canada



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

Product Specifications

CONSTRUCTION & MATERIALS

- **Die cast aluminum housing**
- Tool-less entry
- Mounts on 1.25" [32mm] IP, 1.66" [42mm] O.D. or 2" [51mm] IP, 2.375" [60mm] O.D. horizontal tenon (minimum 8" [203mm] in length) and is adjustable +/- 5° to allow for fixture leveling (**includes two axis T-level to aid in leveling**)
- Luminaire secures with two mounting bolts standard; optional four point mounting available
- 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. Black, bronze, silver and white are available
- **Weight: 24 lbs. (11kg)**

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Class 1 driver
- **Integral 10kV surge suppression protection standard**
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Designed with 0-10V dimming capabilities. Controls by others
- **10V Source Current:** 0.15mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- **Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards**
- Meets CALTrans 611 Vibration testing
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- 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
- **RoHS compliant.** Consult factory for additional details
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT. Please refer to <http://darksky.org/fsa/fsa-products/> for most current information

Electrical Data*

Input Power Designator	System Watts 120-277V	System Watts 347-480V	Total Current (A)					
			120V	208V	240V	277V	347V	480V
F	139	135	1.22	0.68	0.59	0.52	0.40	0.29

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

See final page for watts

XSP Series Version C Ambient Adjusted Lumen Maintenance¹

Ambient	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)	1.04	1.02	1.01	1.00	0.99
10°C (50°F)	1.03	1.01	1.00	0.99	0.98
15°C (59°F)	1.02	1.00	0.99	0.98	0.97
20°C (68°F)	1.01	0.99	0.98	0.97	0.96
25°C (77°F)	1.00	0.98	0.97	0.96	0.95

¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors

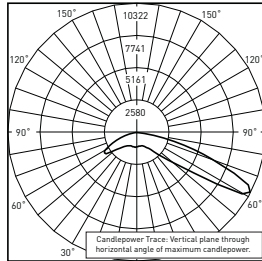
² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

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

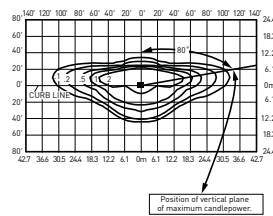
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/street-and-roadway/xsp-series-1>

2LG



CESTL Test Report #: PL04154-001
BXSP-C--2LG-E-30K-UL**
Initial Delivered Lumens: 6,944

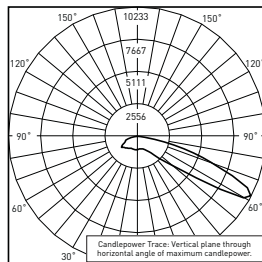


BXSP-C--2LG-F-30K-UL**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 11,134
Initial FC at grade

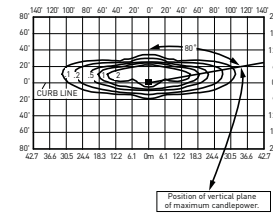
Type II Long Distribution						
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
F	11,134	B2 U0 G2	13,583	B3 U0 G3	14,251	B3 U0 G3

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

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>



CESTL Test Report #: PL04155-001
BXSP-C--2LG-E-30K-UL w/XA-SP1BLS**
Initial Delivered Lumens: 5,302



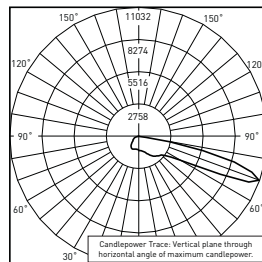
BXSP-C--2LG-F-30K-UL w/XA-SP2BLS**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 8,197
Initial FC at grade

Type II Long 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
F	8,197	B1 U0 G2	10,001	B2 U0 G2	10,493	B2 U0 G2

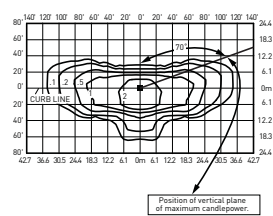
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

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2ME



RESTL Test Report #: PL10389-001A
BXSP-C--2ME-E-40K-UL**
Initial Delivered Lumens: 8,740

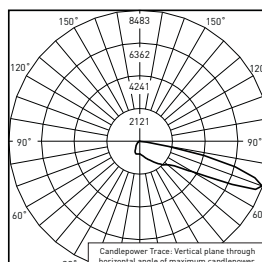


BXSP-C--2ME-F-40K-UL**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,732
Initial FC at grade

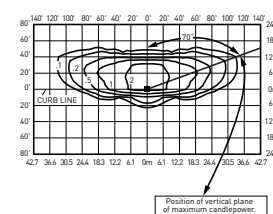
Type II Medium Distribution						
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
F	11,256	B2 U0 G2	13,732	B2 U0 G2	14,408	B2 U0 G2

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

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>



RESTL Test Report #: PL10389-002A
BXSP-C--2ME-E-40K-UL w/XA-SP1BLS**
Initial Delivered Lumens: 6,759



BXSP-C--2ME-F-40K-UL w/XA-SP2BLS**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 11,643
Initial FC at grade

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
F	9,543	B1 U0 G2	11,643	B1 U0 G2	12,215	B1 U0 G2

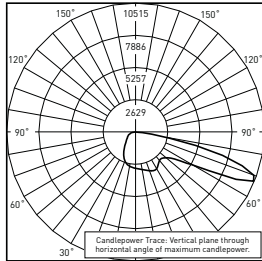
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

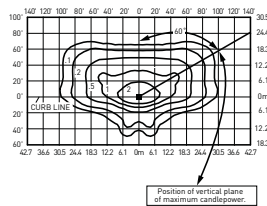
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/street-and-roadway/xsp-series-1>

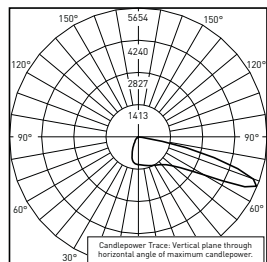
3ME



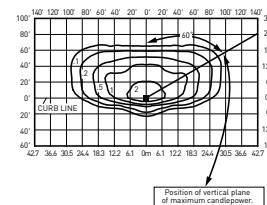
RESTL Test Report #: PL10532-001A
BXSP-C--3ME-F-40K-UL**
Initial Delivered Lumens: 13,408



BXSP-C--3ME-F-40K-UL**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,434
Initial FC at grade



RESTL Test Report #: PL10388-002A
BXSP-C--3ME-E-40K-UL w/XA-SP1BLS**
Initial Delivered Lumens: 6,086



BXSP-C--3ME-E-40K-UL w/XA-SP2BLS**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 11,195
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
F	11,011	B2 U0 G2	13,434	B2 U0 G3	14,095	B2 U0 G3

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

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

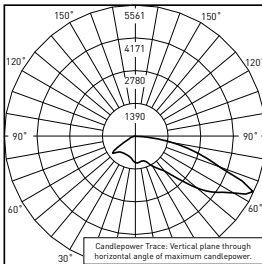
See final page for lumens

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
F	9,176	B1 U0 G2	11,195	B2 U0 G2	11,746	B2 U0 G2

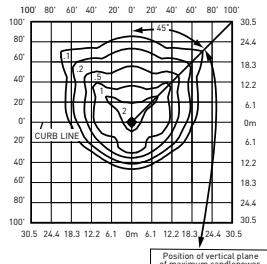
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

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4ME



CESTL Test Report #: PL04091-001
BXSP-C--4ME-E-30K-UL**
Initial Delivered Lumens: 6,923

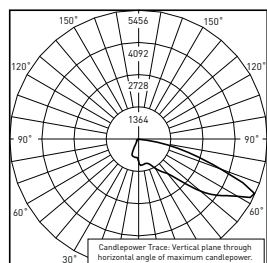


BXSP-C--4ME-F-30K-UL**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 11,134
Initial FC at grade

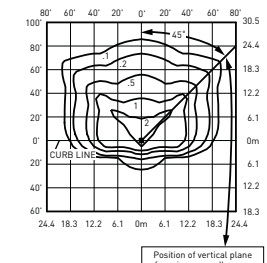
Type IV Medium Distribution						
Input Power Designator	3000K		4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
F	11,134	B2 U0 G2	13,583	B3 U0 G3	14,251	B3 U0 G3

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

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>



CESTL Test Report #: PL04092-001
BXSP-C--4ME-E-30K-UL w/XA-SP1BLS**
Initial Delivered Lumens: 5,530



BXSP-C--4ME-F-30K-UL w/XA-SP2BLS**
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 8,687
Initial FC at grade

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
F	8,687	B1 U0 G2	10,598	B2 U0 G2	11,119	B2 U0 G2

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

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

Luminaire **EPA**

Horizontal Tenon Mount – Weight: 24 lbs. (11kg)				
Single	2 @ 90°	2 @ 180°	3 @ 90°	4 @ 90°
Tenon Configuration If used with Cree tenons, please add tenon EPA with luminaire EPA				
				
PD-1H4; PT-1H	PD-2H4(90); PT-2H(90)	PD-2H4(180); PT-2H(180)	PD-3H4(90); PT-3H(90)	PD-4H4(90); PT-4H(90)
0.69	1.14	1.38	1.83	2.28

Tenon EPA

Part Number	EPA
PD Series Tenons	0.09
PT Series Tenons	0.10
WM-2L	0.13
XA-TMDA8	0.19

Tenons and Brackets* (must specify color)	
Square Internal Mount Horizontal Tenons (Aluminum) - Mounts to 4" (102mm) square aluminum or steel poles PD-1H4 – Single PD-3H4(90) – 90° Triple PD-2H4(90) – 90° Twin PD-4H4(90) – 90° Quad PD-2H4(180) – 180° Twin	Round External Mount Horizontal Tenons (Aluminum) - Mounts to 2.375"-3" (60-76mm) O.D. round aluminum or steel poles or tenons - Mounts to 3" (76mm), 5" (127mm), or 6" (152mm) square pole with PB-1A* tenon PT-1H – Single PT-3H(90) – 90° Triple PT-2H(90) – 90° Twin PT-4H(90) – 90° Quad PT-2H(180) – 180° Twin
Wall Mount Brackets - Mounts to wall or roof WM-2L – Extended Horizontal	Direct Arm Pole Adaptor Bracket - Mounts to 3-6" (76-152mm) round or square aluminum or steel poles XA-TMDA8

* Refer to the [Bracket and Tenons spec sheet](#) for more details

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

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables luminaires within the XSP Series on this page to be tuned to the exact needs of a particular application through multiple levels of adjustment. When a setting other than Q9 is specified with the N option, that setting becomes the maximum wattage of the luminaire, and a NEMA label reflecting this wattage is affixed to the luminaire. Lumen output and power consumption can only be adjusted downward from the maximum wattage.

Q Option Power & Lumen Data

Q Option Setting	CCT	System Watts*		Lumen Values							
		120-277V	347-480V	2LG	2ME	3ME	4ME	2LG w/BLS	2ME w/BLS	3ME w/BLS	4ME w/BLS
9	30K	139	135	11,134	11,256	11,011	11,134	8,197	9,543	9,176	8,687
	40K			13,583	13,732	13,434	13,583	10,001	11,643	11,195	10,598
	57K			14,251	14,408	14,095	14,251	10,493	12,215	11,746	11,119
8	30K	137	131	10,800	10,918	10,681	10,800	7,951	9,257	8,901	8,426
	40K			13,176	13,320	13,031	13,176	9,701	11,294	10,859	10,280
	57K			13,823	13,976	13,672	13,823	10,178	11,849	11,394	10,785
7	30K	127	124	10,466	10,581	10,350	10,466	7,705	8,970	8,625	8,166
	40K			12,768	12,908	12,628	12,768	9,401	10,944	10,523	9,962
	57K			13,396	13,544	13,249	13,396	9,863	11,482	11,041	10,452
6	30K	120	118	10,132	10,243	10,020	10,132	7,459	8,684	8,350	7,905
	40K			12,361	12,496	12,225	12,361	9,101	10,595	10,187	9,644
	57K			12,968	13,111	12,826	12,968	9,549	11,116	10,689	10,118
5	30K	113	112	9,575	9,680	9,469	9,575	7,049	8,207	7,891	7,471
	40K			11,681	11,810	11,553	11,681	8,601	10,013	9,628	9,114
	57K			12,256	12,391	12,122	12,256	9,024	10,505	10,102	9,562
4	30K	102	101	9,019	9,117	8,919	9,019	6,640	7,730	7,433	7,036
	40K			11,002	11,123	10,882	11,002	8,101	9,431	9,068	8,584
	57K			11,543	11,670	11,417	11,543	8,499	9,894	9,514	9,006
3*	30K	93	94	8,462	8,555	8,368	8,462	6,230	7,253	6,974	6,602
	40K			10,323	10,436	10,210	10,323	7,601	8,849	8,508	8,054
	57K			10,831	10,950	10,712	10,831	7,975	9,283	8,927	8,450
2*	30K	83	84	7,460	7,542	7,377	7,460	5,492	6,394	6,148	5,820
	40K			9,101	9,200	9,001	9,101	6,701	7,801	7,501	7,101
	57K			9,548	9,653	9,444	9,548	7,030	8,184	7,870	7,450
1*	30K	72	75	6,792	6,866	6,717	6,792	5,000	5,821	5,597	5,299
	40K			8,286	8,377	8,195	8,286	6,101	7,102	6,829	6,465
	57K			8,693	8,789	8,598	8,693	6,401	7,451	7,165	6,783

* Not available with N option

† Electrical and lumen data at 25°C (77°F). Actual wattage and lumen output may differ by +/-10% when operating between 120-480V +/-10%