## **IG Series**

LED Parking Garage Luminaire

## **Product Description**

Cree innovates again to reset the performance benchmark in parking garage applications with the IG Series featuring WaveMax® Technology, our innovative optical waveguide platform. Available in 33 watt and 66 watt, two lumen packages are offered to satisfy IESNA RP-20-14 Basic and IESNA Security Zone G-1-03 requirements for environments seeking higher light levels for improved safety and security. The streamlined design breaks away from dated traditional designs, blending form and function, to deliver superior low-glare illumination.

Applications: Parking garages

## **Performance Summary**

Utilizes Cree WaveMax® Technology

Initial Delivered Lumens: 3,430 - 7,500 lumens

**Input Power:** 33 or 66 watts **Efficacy:** Up to 118 LPW

Optic: Type V Short Distribution

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

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

CRI: Minimum 80 CRI

Limited Warranty<sup>†</sup>: 10 years on luminaire/5 years on ENC and PML options

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

#### **Accessories**

# Field-Installed Hand-Held Remote

## XA-SENSREM

 For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required

## Snap-On Side Light Shield

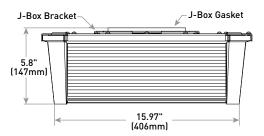
IG-SLS

- Clear anodized aluminum construction
- Order one shield per side as needed
- IES files available at

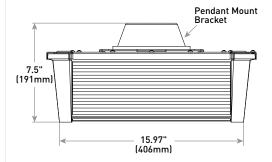
http://lighting.cree.com/products/outdoor/parking-structure/ig-series



#### JB Mount



## **PD Mount**



Weight	
10 lbs. (4.5kg)	

## **Ordering Information**

Fully assembled luminaire is composed of two components that must be ordered separately: Example: Mount: IG-JBWH + Luminaire: IG-NM-5S-A-40K-UL-WH

Mount (Luminaire must be ordered separately	d
IG-	WH
IG-JB Junction Box IG-PD Pendant	Color Options: WH White

Luminaire (Mount must be ordered separately)									
IG	NM	5S				WH			
Product	Mounting	Optic	Input Power Designator	сст	Voltage	Color	Options		
IG	NM No Mount	55 Type V Short	<b>A</b> 33W <b>J</b> 66W	30K 3000K 40K 4000K 57K 5700K	UL 120-277V 34 347V	WH White	PML Programmable Multi-Level - Refer to PML spec sheet for details ENC ENCELIUM® Enabled - Available with J input power designator only - Not available with 34 voltage or PML option - Factory-installed OSRAM ENCELIUM® EN-WCM-ZB-DR module - Commissioning and services by others - Refer to www.encelium.com for additional information - Power consumption increases by 1W		









Rev. Date: V12 10/04/2018



## **Product Specifications**

#### **CREE WAVEMAX® TECHNOLOGY**

Featuring up to 90% optical efficiency and precise control, Cree WaveMax® Technology provides unmatched comfort and decreased LED source luminance by smoothly spreading brightness over a broader area. When integrated with luminous surfaces made of a polymer medium engineered with DiamondFacet™ optical elements, extremely high efficacy luminaires are the result - ultimately creating more visually comfortable and appealing environments while exceeding illumination performance.

#### **CONSTRUCTION & MATERIALS**

- Impact resistant white polycarbonate housing and acrylic lenses
- Corrosion resistant anodized aluminum top plate
- Low profile, lightweight design provides ease of installation
- Standard luminaire can mount to both pendant or J-box (specify mount in ordering table above)
- J-Box mounting bracket mounts directly over existing 4" (102mm) square, rectangular or octagonal junction boxes only
- Pendant mount includes 6" (152mm) wires out of luminaire and provides a splice location for mounting to 3/4" IP pendant (by others)
- Weight: 10 lbs. (4.5kg)

#### OPTICAL SYSTEM

- WaveMax® Technology that improves optical control, optical efficiency, energy efficiency and the overall visual experience
- Acrylic Lenses with DiamondFacet™ Microlenses
- Unmatched low-glare comfort and decreased LED source luminance by smoothly spreading brightness over the optical lenses
- <15% (vs DLC's 25% maximum requirement) of the total lumens fall in the 70-80  $^{\circ}$  zone, reducing high angle brightness while providing superior vertical illumination
- Provides up to twice the vertical illumination recommended in RP-20-14

#### **ELECTRICAL SYSTEM**

- Input Voltage: 120-277V or 347V, 50/60Hz, Class 1 drivers
- Power Factor: > 0.9 at full load
- Total Harmonic Distortion: < 20% at full load
- Input Power: Stays constant over life
- Operating Temperature Range:  $-40\,^{\circ}\text{C}$   $+40\,^{\circ}\text{C}$  ( $-40\,^{\circ}\text{F}$   $+104\,^{\circ}\text{F}$ )
- Designed with 0-10V dimming capabilities standard. Controls by others (Non-PML versions only)
- Integral 6kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current

## **REGULATORY & VOLUNTARY QUALIFICATIONS**

- · cULus Listed
- · Suitable for wet locations
- Suitable for operation in ambient not exceeding 40°C (104°F)
- Requires minimum 90°C supply conductors for 120-277V models
- Requires minimum 75°C supply conductors for 347V models
- Enclosure rated IP66 per IEC 60529
- 6kV 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
- Meets Buy American requirements within ARRA
- DLC and DLC Premium qualified versions available. Please refer to https://www.designlights.org/search/ for most current information
- · RoHS compliant. Consult factory for additional details
- CA RESIDENTS WARNING: Cancer and Reproductive Harm www.p65warnings.ca.gov

Electrical Data*									
	_	_	Total Current (A)						
Input Power Designator	System Watts 120-277V	System Watts 347V	120V	208V	240V	277V	347V		
А	33	35	0.29	0.17	0.15	0.13	0.11		
J	66	69	0.57	0.33	0.28	0.25	0.20		

<sup>\*</sup> Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-347V +/- 10%

IG Series Ar	IG Series Ambient Adjusted Lumen Maintenance <sup>1</sup>								
Ambient	Initial LMF	25K hr Projected <sup>2</sup> LMF	50K hr Calculated <sup>2</sup> LMF	75K hr Calculated³ LMF	100K hr Calculated <sup>3</sup> LMF				
0°C (32°F)	1.04	1.04	1.04	1.04	1.04				
5°C (41°F)	1.03	1.03	1.03	1.03	1.03				
10°C (50°F)	1.02	1.02	1.02	1.02	1.02				
15°C (59°F)	1.02	1.02	1.02	1.02	1.02				
20°C (68°F)	1.01	1.01	1.01	1.01	1.01				
25°C (77°F)	1.00	1.00	1.00	1.00	1.00				
30°C (86°F)	0.99	0.99	0.99	0.99	0.99				
35°C (95°F)	0.98	0.98	0.98	0.98	0.98				
40°C (104°F)	0.98	0.98	0.98	0.98	0.98				

<sup>&</sup>lt;sup>1</sup>Lumen maintenance values at 4000K and 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.

Canada: www.cree.com/canada

Please refer to the Temperature Zone Reference Document for outdoor average nighttime ambient conditions

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)

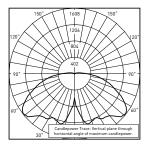
packaged LED chips.

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)

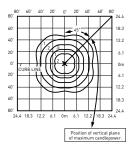
#### **Photometry**

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/parking-structure/ig-series

#### 55



RESTL Test Report #: PL09173-002B IG-\*\*-5S-J-30K-UL Initial Delivered Lumens: 6,923

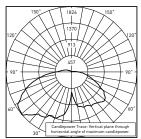


IG-\*\*-5S-J-40K-UL Mounting Height: 15' (4.6m) A.F.G. Initial Delivered Lumens: 7,500 Initial FC at grade

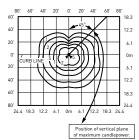
Type V Short Distribution									
	3000K		4000K		5700K				
Input Power Designator	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11			
А	3,430	B2 U3 G1	3,910	B2 U3 G2	3,910	B2 U3 G2			
J	6,930	B3 U3 G2	7,500	B3 U3 G2	7,500	B3 U3 G2			

<sup>\*</sup> Initial delivered lumens at 25  $^{\circ}$ C (77  $^{\circ}$ F). Actual production yield may vary between -10 and +10% of initial delivered

#### 5S w/IG-SLS ACCESSORY



CESTL Test Report #: PL12228-002C -5S-J-40K-UL w/Single IG-SLS Initial Delivered Lumens: 6,540



IG-\*\*-5S-J-40K-UL w/Single IG-SLS Mounting Height: 15' (4.6m) A.F.G. Initial Delivered Lumens: 6,750 Initial FC at grade

Note: For IES files for this and additional shielding configurations, please visit http://lighting.cree.com/products/outdoor/parking-structure/ig-series

Input Power Designator		3000K	3000K			5700K	5700K	
	Shield(s)	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	
	Single	3,087	B2 U3 G2	3,519	B2 U3 G2	3,519	B2 U3 G2	
	Two Opposite	2,710	B1 U3 G1	3,089	B1 U3 G1	3,089	B1 U3 G1	
A	Two Adjacent	2,710	B2 U3 G2	3,089	B2 U3 G2	3,089	B2 U3 G2	
	Three	2,264	B1 U3 G1	2,581	B1 U3 G1	2,581	B1 U3 G1	
	Four	1,784	B1 U1 G1	2,033	B1 U1 G1	2,033	B1 U1 G1	
	Single	6,237	B3 U3 G3	6,750	B3 U3 G3	6,750	B3 U3 G3	
	Two Opposite	5,475	B2 U3 G2	5,925	B2 U3 G2	5,925	B2 U3 G2	
J	Two Adjacent	5,475	B3 U3 G3	5,925	B3 U3 G3	5,925	B3 U3 G3	
	Three	4,574	B2 U3 G2	4,950	B2 U3 G2	4,950	B2 U3 G2	
	Four	3,604	B1 U1 G1	3,900	B2 U1 G1	3,900	B2 U1 G1	



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

<sup>\*</sup> 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