

IG Series

LED Parking Garage Luminaire

Rev. Date: V19 02/21/2023

Product Description

Cree Lighting 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 IES RP-20-14 Basic and IES 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.

For enhanced performance and versatility, a range of optional integrated lighting controllers bring advanced capabilities and energy savings to the IG Series. From the stand-alone multi-level PML option to the full-featured Synapse® Wireless Controller, the IG Series provides the features and flexibility designed to meet the needs of today's most demanding parking garage applications.

Applications: Parking garages

Performance Summary

Utilizes 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 by Cree Lighting from US and imported parts
CCT: 3000K (+/- 300K), 4000K (+/- 300K), 5700K (+/- 500K)
CRI: Minimum 80 CRI
Limited Warranty*: 10 years for luminaire; 5 years for PML; up to 5 years for Synapse® accessories; 1 year for luminaire accessories

*See <http://creelighting.com/warranty> for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

Ordering Information

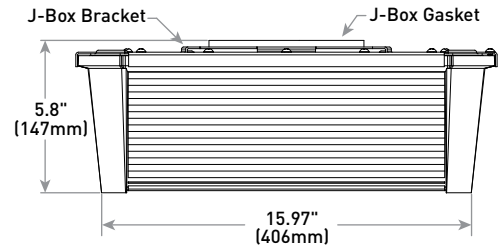
Fully assembled luminaire is composed of two components that must be ordered separately:
Example: **Mount:** IG-JBWH + **Luminaire:** IG-NM-5S-A-40K-UL-WH

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

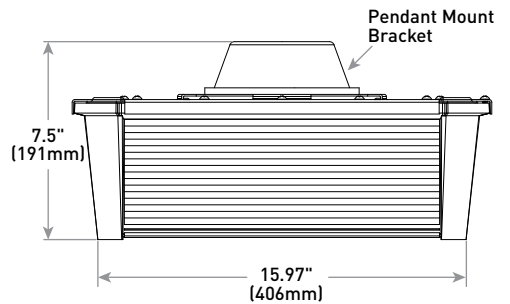
Luminaire (Mount must be ordered separately)							
IG	NM	5S				WH	
Product	Mounting	Optic	Input Power Designator	CCT	Voltage	Color	Options
IG	NM No Mount	5S Type V Short	A 33W J 66W	30K 3000K 40K 4000K 57K 5700K	UL 120-277V 34 347V	WH White	PML Programmable Multi-Level <ul style="list-style-type: none"> - Uses built-in occupancy sensing and field-adjustable ambient light sensitivity to independently control the light output of each luminaire - Refer to PML spec sheet for details - Not available with SWC options - XA-SENSREM hand-held remote required (see Accessory table on page 2) SWC Synapse® Wireless Controller <ul style="list-style-type: none"> - Provides real-time lighting control with utility-grade power monitoring (+/-2%) - Uses a highly reliable SimplySNAP mesh network - SimplySNAP Gateway is required (see Accessory table on page 2) - Not available with 34 voltage or PML options SWC-NS Synapse® Wireless Controller with Network Sensor <ul style="list-style-type: none"> - Adds customizable sensor for motion or ambient light detection with use of Daylight Harvesting Accessory (see Accessory table on page 2) - Sensor configured for motion sensing as factory default - SimplySNAP Gateway is required (see Accessory table on page 2) - Not available with 34 voltage or PML options



JB Mount



PD Mount



Weight

10 lbs. (4.5kg)



US: creelighting.com T (800) 236-6800

Canada: creelighting-canada.com T (800) 473-1234

CREE ⇄ **LIGHTING**

Product Specifications

WAVEMAX® TECHNOLOGY

Featuring up to 90% optical efficiency and precise control, 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.

SYNAPSE® SIMPLYSNAP INTELLIGENT CONTROL

The Synapse SimplySNAP platform is a highly intuitive connected lighting solution featuring zone dimming, motion sensing, and daylight harvesting with utility-grade power monitoring and support of up to 1000 nodes per gateway. The system features a reliable and robust self-healing mesh network with a browser-based interface that runs on smartphones, tablets, and PCs. The integrated Synapse® Wireless Controller (SWC) and Wireless Controller with Network Sensor (SWC-NS) take the IG Series to a new performance plateau, providing extreme energy productivity, code compliance and a better light experience.

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
- 6% Uplight
- <15% [vs DLC's 25% maximum requirement] of the total lumens fall in the 70-80° 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°C - +40°C (-40°F - +104°F)
- Designed with 0-10V dimming capabilities standard. Controls by others
- Integral 6kV/3kA 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 60598
- ANSI C136.2 6kV/3kA surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaires with SWC/SWC-NS options meet FCC Part 15, Subpart C limits for conducted and radiated emissions
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

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

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347V +/- 10%

IG Series Ambient Adjusted Lumen Maintenance ¹					
Ambient	Initial LMF	25K hr Reported ² LMF	50K hr Estimated ³ LMF	75K hr Estimated ³ LMF	100K hr Estimated ³ 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

¹Lumen maintenance values at 4000K and 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.

²In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

³Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

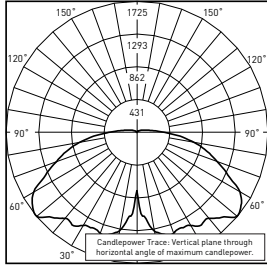
Accessories

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://creelighting.com/products/outdoor/parking-structure/ig-series
Synapse Wireless Control Accessories	
SimplySNAP On-Site Controller SS450-002 - Verizon® LTE-enabled - Designed for indoor applications - Refer to SS450-002 spec sheet for details	Outdoor Antennas (Optional, for increased range, 8dB gain) KIT-ANT420SM - Kit includes antenna, 20' cable and bracket KIT-ANT360 - Kit includes antenna, 30' cable and bracket KIT-ANT600 - Kit includes antenna, 50' cable and bracket - Refer to Outdoor antenna spec sheet for details
SimplySNAP Central Base Station CBSW-450-002 - Includes On-Site Controller (SS450-002) and 5-button switch - Indoor and Outdoor rated - Refer to CBSW-450-002 spec sheet for details	Synapse Wireless Sensor WSN-DPM - Motion and light sensor - Control multiple zones - Refer to WSN-DPM spec sheet for details
Building Management System (BMS) Gateway BMS-GW-002 - Required for BACnet integration - Refer to BMS-GW-002 spec sheet for details	
Synapse Wireless Switch WSW-02-PS WSW-08-PS - Two or eight button low-voltage wall control - Refer to WSW spec sheet for details	

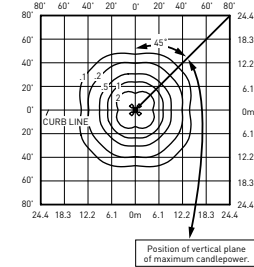
Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/parking-structure/ig-series>

55



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



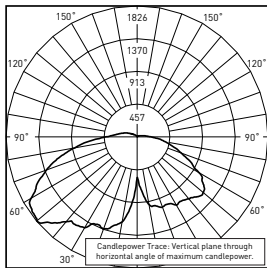
IG--5S-J-40K-UL**
Mounting Height: 15' (4.6m) A.F.G.
Initial Delivered Lumens: 7,500
Initial FC at grade

Type V Short Distribution						
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
A	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

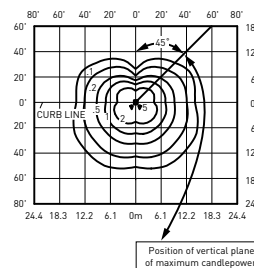
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** 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>

55 w/IG-SLS ACCESSORY



CESTL Test Report #: PL12228-002C
IG--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://creelighting.com/products/outdoor/parking-structure/ig-series>

Type V Short Distribution w/Side Light Shield							
Input Power Designator	Shield(s)	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
A	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
	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
J	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
	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

* 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>