IG Series

LED Parking Garage Luminaire

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-, 60- and 76-watt, three lumen packages are offered to satisfy IES RP-8-21 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 (BML) option to the Synapse® wireless control options, 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: 3,860 - 10,350 lumens

Input Power: 33 - 76 watts

Efficacy: Up to 136 LPW

Optic: Type V Short Distribution

Assembled in the USA by Cree Lighting from US and imported parts

CCT: 3000K, 3500K, 4000K, 5700K

CRI: Minimum 80 CRI

Limited Warranty⁺: 10 years for luminaire; 5 years for BML option; 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

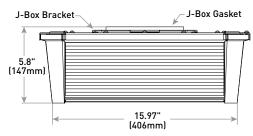
Ordering Information

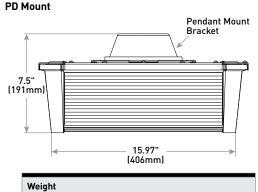
Fully assembled luminaire is composed of two components that must be ordered separately: Example: Mount: IG-JBWH + Luminaire: IG-B-NM-5S-4L-40K8-UL-WH

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



JB Mount





10 lbs. (4.5kg)

Luminai	uminaire (Mount must be ordered separately)												
IG	в	NM	5S				₩Н						
Product	Version	Mounting	Optic	Lumen Package	CCT/CRI	Voltage	Color	Options					
16	В	NM No Mount	55 Type V Short	4L 4,000 Lumens 7L 7,000 Lumens 10L 10,000 Lumens	30K8 3000K, 80 CRI 35K8 3500K, 80 CRI 40K8 4000K, 80 CRI 57K8 5700K, 80 CRI	UL 120-277V UH 347-480V	WH White	 BML Bluetooth* Technology Enabled Multi- Level Sensor - Utilizes a multifunction sensor - Available only with UL voltage - Refer to BML spec sheet for details - 8-20' sensor lens installed on luminaire; 20-40' sensor lens and aisle shroud included - Not available with Synapse controls 	 SWC Synapse* Wireless Controller 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 UH voltage or BML or SWS options SWS Synapse* Wireless Controller with Network Sensor Utilizes a multifunction sensor 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 UH voltage or BML or SWC options 				





US: creelighting.com T (800) 236-6800 Canada: creelighting-canada.com T (800) 473-1234

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.

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
- 5.4% 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-8-21

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
- 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
- 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 and SWS options meet FCC Part 15, Subpart C limits for conducted and radiated emissions
- · Assembled in the USA by Cree Lighting from US and imported parts
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- DLC Premium qualified when ordered with 4L or 7L lumen packages. Please refer to https://qpl.designlights.org/solid-state-lighting for most current information
- CA RESIDENTS WARNING: Cancer and Reproductive Harm www.p65warnings.ca.gov

INTELLIGENT LIGHTING CONTROL OPTIONS

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. The integrated platform takes the IG Series to a new performance plateau, providing extreme energy productivity, code compliance and a better light experience.

Electrical Data*									
		Total Current (A)							
Lumen Package	System Watts 120-480V**	120V	208V	240V	277V	347V**	480V**		
4L	33	0.28	0.16	0.14	0.12	0.10	0.07		
7L	60	0.52	0.30	0.26	0.22	0.17	0.13		
10L	76	0.64	0.37	0.32	0.28	0.22	0.16		

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10% ** Synapse wireless options available with 120-277V only

IG Series (Version B) Ambient Adjusted Lumen Maintenance¹

	Initial LMF	25K hr Reported ² LMF	50K hr Reported ² LMF	75K hr Estimated³ LMF	100K hr Estimated ³ LMF			
0°C (32°F)	1.04	0.99	0.97	0.94	0.92			
5°C (41°F)	1.03	0.99	0.96	0.94	0.91			
10°C (50°F)	1.02	0.98	0.95	0.93	0.90			
15°C (59°F)	1.02	0.97	0.95	0.92	0.90			
20°C (68°F)	1.01	0.96	0.94	0.91	0.89			
25°C (77°F)	1.00	0.96	0.93	0.91	0.89			
30°C (86°F)	0.99	0.95	0.92	0.90	0.88			
35°C (95°F)	0.99	0.94	0.91	0.89	0.86			
40°C (104°F)	0.98	0.93	0.91	0.88	0.86			

¹Lumen maintenance values at 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 lumer maintenance factors. Please refer to the <u>Temperature Zone Reference Document</u> for outdoor average nighttime ambient conditions

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

Accessories

Field-Installed	
Bird Shroud Kit	Snap-On Side Light Shield
IG-BG	IG-SLS
- For use only with pendant mount	 16ga. aluminum construction w/clear anodized finish
- 22ga. aluminum construction w/clear	- May not be used in combination with the IG-BG accessory
anodized finish	 Order one shield per side as needed
- May not be used in combination with the	- IES files available at
IG-SLS accessory	https://www.creelighting.com/products/outdoor/parking-
	structure/ig-series/
	Pendant Mount Kits
	XA-PS12KIT* – 5" (127mm) pendant
	XA-PS18KIT* – 11" (279mm) pendant
	XA-PS22KIT* – 15" (381mm) pendant
	- Includes two conduit fittings and 3/4-14 NPT pipe threaded on
	two ends
	 * Must specify color: BK (Black), BZ (Bronze), SV (Silver) or WH (White)

Synapse Wireless Switch

WSW-02-PS

WSW-08-PS

Outdoor Antennas

KIT-ANT420SM

KIT-ANT360

KIT-ANT600

Synapse Wireless Senso WSN-DPM

- Motion and light sensor

Control multiple zones

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

SimplySNAP Central Base Station CBSSW-450-002

- Includes On-Site Controller
- (SS450-002) and 5-button switch Indoor and Outdoor rated
- Refer to CBSSW-450-002 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



Two or eight button low-voltage wall control

- Refer to WSW spec sheet for details

(Optional, for increased range, 8dB gain)

- Kit includes antenna, 20' cable and bracket

Kit includes antenna, 30' cable and bracket

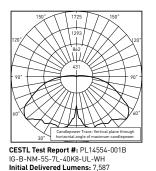
Kit includes antenna, 50' cable and bracket

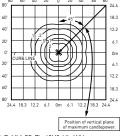
- Refer to Outdoor antenna spec sheet for details

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

5S





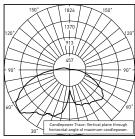
IG-B-NM-5S-7L-40K8-UL-WH Mounting Height: 15' (4.6m) A.F.G. Initial Delivered Lumens: 7,550 Initial FC at grade

Type V Short Distribution

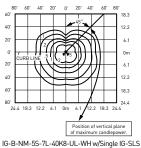
	3000K				3500K/4000K/5700K				
	UL Voltage		UH Voltage		UL Voltage		UH Voltage		
Lumen Package	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	
4L	4,100	B2 U3 G2	3,860	B2 U3 G2	4,480	B2 U3 G2	3,860	B2 U3 G2	
7L	7,550	B3 U3 G2							
10L	10,350	B3 U3 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.

5S w/IG-SLS ACCESSORY



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



IG-B-NM-55-7L-40K8-UL-WH w/Single IG-Mounting Height: 15' (4.6m) A.F.G. Initial Delivered Lumens: 6,800 Initial FC at grade

Type V Short Distribution w/Side Light Shield

		3000K			3500K/4000K/5700K					
Lumen		UL Voltage		UH Voltage	UH Voltage		UL Voltage		UH Voltage	
Package	Shields	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20							
	Single	3,690	B2 U3 G2	3,470	B2 U3 G2	4,030	B2 U3 G2	3,470	B2 U3 G2	
	Two Opposite	3,240	B1 U3 G1	3,050	B1 U3 G1	3,540	B2 U3 G2	3,050	B1 U3 G1	
4L	Two Adjacent	3,240	B2 U3 G2	3,050	B2 U3 G2	3,540	B2 U3 G2	3,050	B2 U3 G2	
	Three	2,710	B1 U3 G1	2,550	B1 U3 G1	2,960	B1 U3 G1	2,550	B1 U3 G1	
	Four	2,130	B1 U1 G1	2,010	B1 U1 G1	2,330	B1 U1 G1	2,010	B1 U1 G1	
	Single	6,800	B3 U3 G3							
	Two Opposite	5,975	B2 U3 G2							
۲L	Two Adjacent	5,975	B3 U3 G3							
	Three	4,980	B2 U3 G2							
	Four	3,930	B2 U1 G1							
	Single	9,325	B3 U3 G3							
	Two Opposite	8,175	B3 U3 G3							
10L	Two Adjacent	8,175	B3 U3 G3							
	Three	6,825	B2 U3 G2							
	Four	5,375	B2 U1 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

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

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