



# IG SERIES

LED PARKING STRUCTURE LUMINAIRE

Makes You Want to Spend More Time in the Garage.

**CREE** 

**LED Parking Structure Luminaire**

# LIGHTING THAT SUCCEEDS ON EVERY LEVEL.

## UNPRECEDENTED ILLUMINATION QUALITY

The IG Series with WaveMax™ Technology brings unprecedented capabilities and performance to parking garage applications, with unmatched low-glare performance and exceptionally bright, uniform light and high CRI for enhanced safety and visibility.

## OUTSTANDING IN FORM & FUNCTION

Minimal footprint, minimal maintenance, maximum impact. The streamlined design of the IG Series blends form with function to deliver superior low-glare illumination in a sleek, low-profile design—forever changing the way you'll see parking garage lighting. With light-weight materials and durable construction, the IG Series requires near-zero maintenance.

## DOMINATING EFFICIENCY

Powers past any rival. Compared to 175 watt metal halide solutions, the IG Series provides up to 118 lumens per watt (LPW) for an 80% energy savings and payback in just under 2 years.\* And, benchmarked against other popular LED parking garage luminaires, the IG Series is 30% more energy-efficient.

\*Running 24/7 at the national average of \$0.11 per kWh





# FROM THE COMPANY THAT CHANGED HOW THE WORLD SEES LIGHT, OUR MOST INTELLIGENT LIGHT EVER.

With the introduction of the Cree® SC5 Technology Platform, Cree has already transformed LED lighting. Advances in the use of silicon carbide enable unparalleled lumens per watt, effectively doubling the lumens produced by a single LED and delivering much longer life at higher operating temperatures. That breakthrough changed how the world thinks about lighting.

Now, thanks to WaveMax™ Technology, Cree has once again changed how it is delivering light.

## WAVEMAX™ TECHNOLOGY. DELIVERING LIGHT WITH PRECISION.

Nothing less than a revolution, WaveMax™ Technology represents a breakthrough in the execution of waveguide technology that challenges industry-standard assumptions of how light is delivered.



### DiamondFacet™ Optical Elements

In developing WaveMax™ Technology, Cree engineers leveraged a property known as Total Internal Reflection that captures light within the internal geometry of the optical waveguide platform. To release and control the light, Cree engineers devised yet another innovation: DiamondFacet™ optical elements – unique microscopic features located within the optical waveguide platform that extract and deliver light with exceptional control, uniformity and efficiency.

These advancements in lighting optics and dispersion enabled Cree designers to fashion the progressive physical design of the IG Series, which has a lens luminance that's only achievable through the combination of LED and WaveMax™ Technology.



### Superior Low-Glare Illumination & Low Profile Design

WaveMax™ Technology powers the IG Series to provide unmatched low-glare comfort and decreased LED source luminance by smoothly distributing brightness over optical lenses to cast rich illumination that maximizes detail and defeats shadows. The IG Series also delivers upright illumination to prevent a cave-like effect and improve the overall visual experience.

The efficiency of WaveMax™ Technology allowed Cree engineers to design the IG Series luminaire as a low-profile fixture constructed of impact-resistance polycarbonate and acrylic for a clean, purposeful look.

# 80%

### Percent Energy Savings Compared to National Average

The IG Series delivers exceptional value with its low initial cost and remarkably low energy consumption. In either 33 watt or 66 watt configuration, you can expect lower operating costs throughout the life of the fixture.

Garage structures typically operate 24 hours a day. When compared to incumbent 175 watt metal halide solutions, at the national average electricity cost of \$0.11 per kWh, the IG Series provides up to 118 lumens per watt (LPW) for an 80% energy savings, delivering payback in just under two years. Even more impressive, the IG Series saves up to 30% in energy when benchmarked against earlier generation LED parking garage luminaires.

# FEATURES WORTH SPECIFYING.

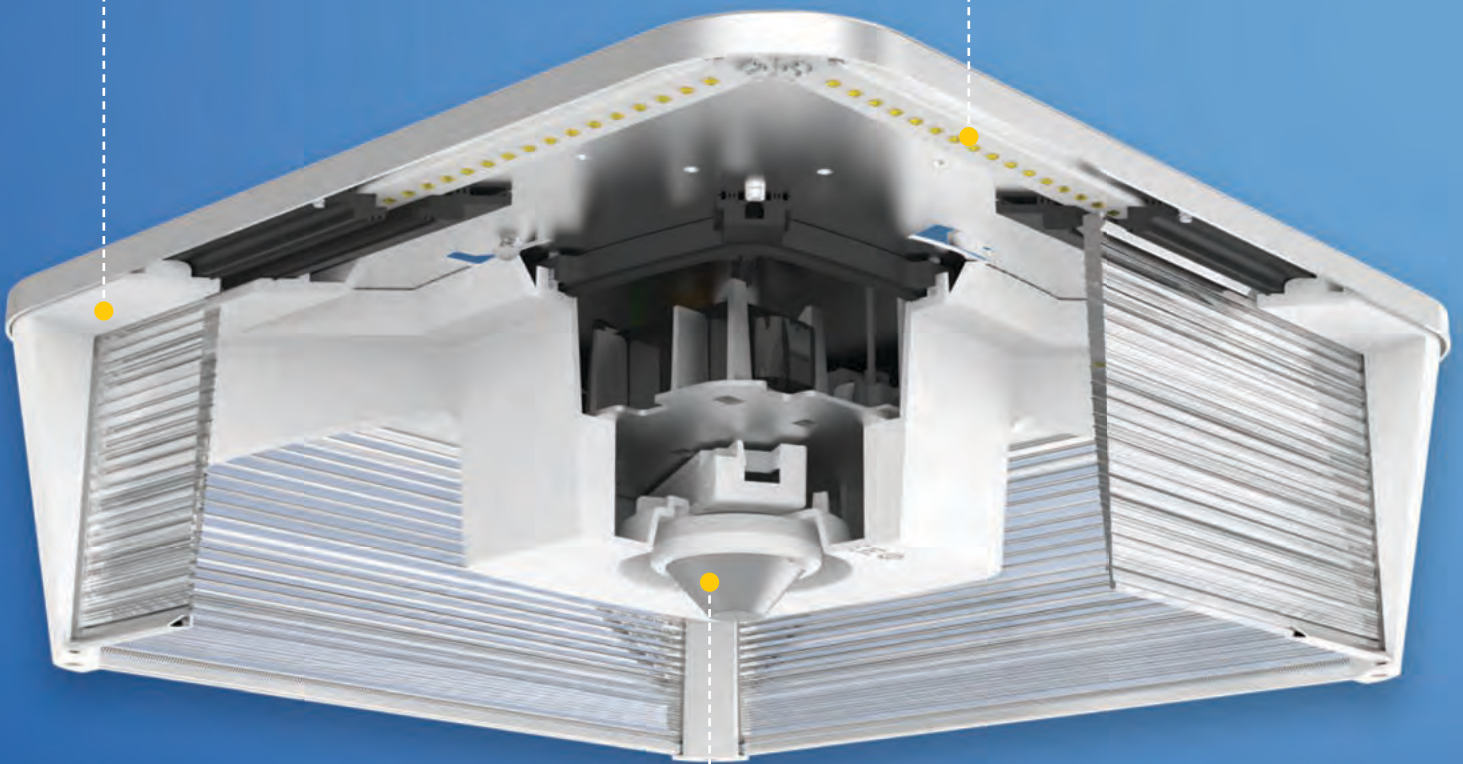
The streamlined design is a departure from the traditional designs of HID and fluorescent luminaires. The innovation of WaveMax™ Technology allowed Cree engineers to fashion a low-profile fixture using impact-resistance polycarbonate and acrylic for a clean, purposeful look. The robust construction protects the luminaire from intentional and unintentional abuse and external elements and is IP66 rated. Plus, the use of advanced materials reduces the bulk and weight of these units for easier installation.

## CONSTRUCTION

- Low profile, lightweight design provides ease of installation
- Impact resistant polycarbonate and acrylic materials
- Mounting accessory with choices of J-box and pendant mount
- White finish
- Robust construction achieves IP66 rating
- Dimensions: 14.5" (368mm) L x 14.5" (368mm) W x 5" (127mm) H
- Weight: 10 lbs. (4.5kg)

## PERFORMANCE

- Operates at 33 watts or 66 watts
- Lumen package for IESNA RP20-14 Basic or IESNA Security Zone G-1-03 requirements
- 80% energy savings versus metal halide, 30% over previous-gen LED
- Virtually zero maintenance



## CONTROL

An optional programmable multi-level occupancy sensor with ambient light sensor allows for simple selection, via a hand-held remote, of input power for high and low occupancy modes.

# SPECIFICATIONS THAT EXCEED EXPECTATIONS.

Cree® IG Series parking garage luminaires are powered by Cree WaveMax™ Technology to deliver superior value and illumination performance by distributing visually comfortable light with unmatched uniformity, efficiency, control and appeal. The technology-driven design and construction delivers light where it's needed – all in a low-profile design that looks as great as it performs.

PERFORMANCE SUMMARY
Utilizes Cree WaveMax™ Technology
<b>Initial Delivered Lumens:</b> 3,910 or 7,500 lumens
<b>Input Power:</b> 33 or 66 watts
<b>Efficacy:</b> Up to 118 LPW
<b>CRI:</b> Minimum 80 CRI
<b>CCT:</b> 4000K, 5700K
<b>OPTIC:</b> Type V Short Distribution
<b>Limited Warranty:</b> 10 years*

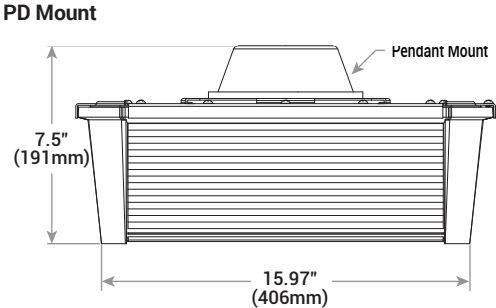
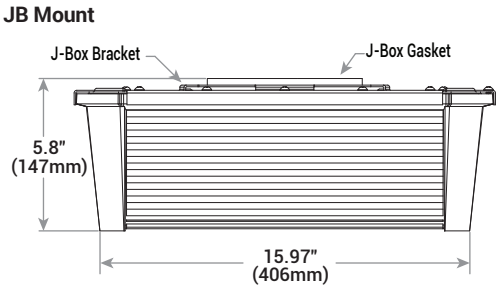
\*See [www.cree.com/lighting/products/warranty](http://www.cree.com/lighting/products/warranty) for warranty terms

ACCESSORIES
<b>Hand-Held Remote XA-SENSREM</b> For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required

ORDERING INFORMATION
Fully assembled luminaire is composed of two components that must be ordered separately: Example: <b>Mount:</b> IG-JB WH + Luminaire: IG A NM 5S A 40K-UL WH PML

MOUNT (Luminaire must be ordered separately)	
<b>IG</b>	<b>WH</b>
IG-JB Junction Box IG-PD Pendant	<b>Color Options:</b> WH White

LUMINAIRE (Mount must be ordered separately)							
<b>IG</b>	<b>NM</b>	<b>5S</b>				<b>WH</b>	
<b>Product</b>	<b>Mounting</b>	<b>Optic</b>	<b>Input Power Designator</b>	<b>CCT</b>	<b>Voltage</b>	<b>Color</b>	<b>Options</b>
IG	NM No Mount	5S Type V Short	A 33W, 3,910 lumens - 118 LPW J 66W, 7,500 lumens -114 LPW	40K 4000K 57K 5700K	UL 120-277V 34 347V	WH White	<b>PML Programmable Multi-Level</b> - Refer to PML spec sheet for details



**WEIGHT:** 10 lbs (4.5kg)

### CONSTRUCTION & MATERIALS

- Impact resistant white polycarbonate housing and acrylic lenses
- Corrosion resistant anodized aluminum top plate
- Low profile, lightweight design provides ease of installation
- J-Box mounting bracket mounts directly over existing 4" (102mm) square, rectangular or octagonal junction boxes only
- Pendant mount includes 66" (1,676mm) wires out of luminaire and is intended to be mounted by 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™ optical elements
- Unmatched low-glare comfort and decreased LED source luminance by smoothly spreading brightness over the optical lenses
- 8% Uplight

### 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)
- Integral 6kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breaker should be used

### REGULATORY & VOLUNTARY QUALIFICATIONS

- Suitable for wet locations
- IP66 enclosure rating per IEC 60529
- 6kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15 standards for conducted and radiated emissions

### ELECTRICAL DATA\*

Input Power Designator	System Watts 120-277V	System Watts 347V	Total Current				
			120V	208V	240V	277V	347V
A	33	35	0.34	0.20	0.17	0.15	0.12
J	66	69	0.67	0.39	0.33	0.29	0.25

\* Electrical data at 25°C (77°F)

### RECOMMENDED IG SERIES LUMEN MAINTENANCE FACTORS (LMF)<sup>1</sup>

Ambient	Input Power Designator	Initial LMF	25K hr Projected <sup>2</sup> LMF	50K hr Projected <sup>2</sup> LMF	75K hr Calculated <sup>3</sup> LMF	100K hr Calculated <sup>3</sup> LMF
5°C (41°F)	A	1.04	1.00	0.97	0.95	0.92
	J					
10°C (50°F)	A	1.03	0.99	0.96	0.94	0.91
	J					
15°C (59°F)	A	1.02	0.98	0.95	0.93	0.90
	J					
20°C (68°F)	A	1.01	0.97	0.94	0.92	0.89
	J					
25°C (77°F)	A	1.00	0.96	0.93	0.91	0.88
	J					
30°C (86°F)	A	0.99	0.95	0.92	0.90	0.87
	J					
35°C (95°F)	A	0.98	0.94	0.91	0.89	0.86
	J					
40°C (104°F)	A	0.97	0.93	0.90	0.88	0.85
	J					

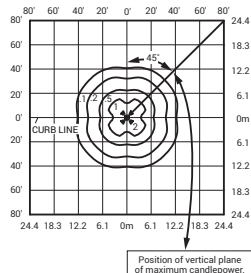
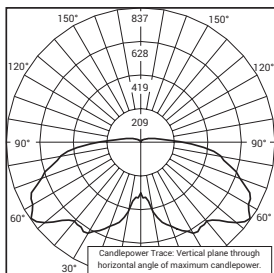
<sup>1</sup> Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

<sup>2</sup> 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 (IDUT) i.e. the packaged LED chip

<sup>3</sup> 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 (IDUT) 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: [www.cree.com/Lighting](http://www.cree.com/Lighting)



Preliminary  
**RESTL Test Report #:** PL05614-001  
 IG A \*\* 5S A 40K-UL  
**Initial Delivered Lumens:** 3,696

IG A \*\* 5S A 40K-UL  
**Mounting Height:** 15' (4.6m) A.F.G.  
**Initial Delivered Lumens:**  
 3,910 Initial FC at grade

### TYPE V SHORT DISTRIBUTION

Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
A	3,910	B2 U3 G2	3,910	B2 U3 G2
J	7,500	B3 U3 G3	7,500	B3 U3 G3

\* Initial delivered lumens at 25°C (77°F)

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: [www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf](http://www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf)