



# High Output Parking Garage (HPG)

## Parking Garage & Commercial Canopy Light

**IP66**

### OVERVIEW

Lumen Package	10,000 - 23,000
Wattage Range	67-188
Efficacy Range (LPW)	107-140
Weight lbs(kg)	18.5 (8.4)

### QUICK LINKS

[Ordering Guide](#)[Performance](#)[Photometrics](#)[Dimensions](#)

## FEATURES & SPECIFICATIONS

### Construction

- Pendant mount includes a 5 foot long cord. Order stem and J box cover as an accessory
- Direct mount to surface or recessed J box with hardware bracket kit ordered separately as an accessory.
- Rugged low-profile die-cast aluminum housing, optical unit, and driver cover.
- Access to optical chamber and driver housing for serviceability
- IP66 rated luminaire protects integral components from dust and water.
- Fixtures are finished with LSI's DuraGrip Polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling
- Four fasteners secure the door frame to housing. Door frame also provides quick and easy access to the electrical compartment for servicing
- Shipping weight: 18.5 lbs in carton.

### Optical System

- 5Q distribution uses an optical grade PMMA acrylic lens to create an industry leading square symmetrical distribution.
- 5C distribution utilizes a clear tempered flat glass lens to uniformly illuminate the area.
- FT and 5R distributions use clear tempered flat glass and optical grade PMMA acrylic lenses.
- Available in 5000K, 4000K and 3000K color temperatures.
- Minimum CRI of 80.

### Electrical

- High-Performance programmable driver features over-voltage, under-voltage, short circuit and over temperature protection. Custom lumen and wattage packages available.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >100k Hours (See Lumen Maintenance on Page 2)
- Total harmonic distortion: <20%
- Direct mount operating temperature: 10L -40°C to +50°C (-40°F to +122°F), 13L & 15L -40°C to +40°C (-40°F to +104°F), 20L -40°C to +35°C (-40°F to +95°F), 23L pendant mount only.
- Pendant mount operating temperature: 10L, 13L & 15L -40°C to +50°C (-40°F to +122°F), 20L -40°C to +45°C (-40°F to +113°F), 23L -40°C to +35°C (-40°F to +95°F).
- Power factor: >0.90

Field replaceable surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2)

- High-efficacy LEDs are mounted to (4) circuit boards to maximize heat dissipation
- Driver components are fully encased in

potting material for moisture resistance. Driver complies with FCC standards.

### Installation

- Aluminum locking collar and gasket utilized for pendant installation. Stem and J box cover not included, order as an accessory
- Direct mount to surface or recessed J box with hardware bracket kit ordered separately as an accessory.

### Warranty

- LSI LED Fixtures carry a 5-year warranty or 10-year warranty with registration for petroleum applications only (contact your LSI representative for details).

### Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- State of California Title 24 Compliant with IMSBT or ALSC/ALSCS option.





# High Output Parking Garage HPG

[Back to Quick Links](#)

## ORDERING GUIDE

TYPICAL ORDER EXAMPLE: **HPG P 23L 5Q UNV 40K8 MSV ALBCS1**




Family / Size	Mounting	Lumen Package	Distribution	Voltage	Color Temperature	Finish	Options
HPG - High Output Parking Garage Luminaire	P - Pendant 5 ft cord	10L - 10000 Lumens 13L - 13000 Lumens	5Q - Type 5 Square Distribution	UNV - Universal Voltage (120-277V)	30K8 - 3,000K CCT 40K8 - 4,000K CCT 50K8 - 5,000K CCT	BRZ - Dark Bronze BLK - Black MSV - Metallic Silver PLP - Platinum Plus WHT - White	Blank - NONE IMSBT1 - Integral Bluetooth Motion and Photocell Sensor 8 - 24' mounting height <sup>1</sup> IMSBT2 - Integral Bluetooth Motion and Photocell Sensor 25-40' mounting height <sup>1</sup> ALSC - AirLink Synapse Wireless Control System ALSCS - Airlink Synapse Wireless Control System with Sensor ALBCS1 - AirLink Blue Wireless Motion & Photo Sensor Controller (8-24' mounting height) ALBCS2 - AirLink Blue Wireless Motion & Photo Sensor Controller (25 - 40' mounting height)
	D - Direct Mount (Comes with Quick Mount Plate)	15L - 15000 Lumens 20L - 20000 Lumens 23L - 23000 Lumens  Custom Lumen Packages <sup>2</sup>	5C - Type 5 Concentrated  FT - Forward Throw  5R - Type 5 Rectangular	HV - High Voltage (347 - 480V)			

**FOOTNOTES:**

- 1 - IMSBT is field configurage via the LSI app that can be downloaded from your smartphone's native app store
- 2 - Custom Lumen and wattage packages available consult factory. Values are within industry standard tolerances but not DLC listed.

## Canopy Accessories (Field Installed)

TYPICAL ORDER EXAMPLE: **BC600 3 BLK**

Description	Order Number	Image
3/4"(19mm) Top Decorative Box Cover Aligner	BC600 3	
3/4"(19mm) Top Round Box Cover Aligner	BC585	
3/4"(19mm) Top Square Box Cover Aligner	BC585SQ	

## Stem Accessories (Field Installed)

TYPICAL ORDER EXAMPLE: **ST6 3 BLK**

Description	Order Number	Image
3/4" x 6" (19mmx152mm) Aluminum Stem	ST 6 3	
3/4" x 12" (19mmx .4m) Aluminum Stem	ST 12 3	
3/4" x 18" (19mmx .5m) Aluminum Stem	ST 18 3	
3/4" x 24" (19mmx .6m) Aluminum Stem	ST 24 3	
3/4" x 36" (19mmx .9m) Aluminum Stem	ST 36 3	
3/4" x 48" (19mmx 1.2m) Aluminum Stem	ST 48 3	
3/4" x 60" (19mmx 1.5m) Aluminum Stem (Must order PL - Pendant Mount, 7ft Cord)	ST 60 3	

\* Standard canopy finishes available in white (WHT), black (BLK) and bronze (BRZ); other custom finishes available may require longer lead-times.

## Accessory Ordering Information

Description	Part Number
HPG Bird Guard Kit, White	697691
BRKT HPG DIRECT MNT W/HDWR	752172R2





# High Output Parking Garage HPG

[Back to Quick Links](#)

## PERFORMANCE

DELIVERED LUMENS*												
Drive Current	Distribution	CRI	3000K CCT			4000K CCT			5000K CCT			Wattage
			Delivered Lumens	Efficiency	BUG Rating	Delivered Lumens	Efficiency	BUG Rating	Delivered Lumens	Efficiency	BUG Rating	
10L	5C	80	9605	131	B3-U0-G1	10328	141	B3-U0-G1	10177	139	B3-U0-G1	73
	5Q		9336	127	B3-U0-G2	10038	137	B3-U0-G2	9892	135	B3-U0-G2	
	5R		9478	129	B3-U0-G1	10191	139	B3-U0-G1	10043	137	B3-U0-G1	
	FT		9342	128	B3-U0-G2	10044	137	B3-U0-G2	9898	135	B3-U0-G2	
13L	5C	80	12358	129	B3-U0-G1	13288	139	B3-U0-G1	13094	137	B3-U0-G1	96
	5Q		12012	126	B4-U0-G2	12915	135	B4-U0-G2	12727	133	B4-U0-G2	
	5R		12195	127	B3-U0-G2	13112	137	B3-U0-G2	12921	135	B3-U0-G2	
	FT		12020	126	B3-U0-G2	12923	135	B3-U0-G3	12735	133	B3-U0-G3	
15L	5C	80	14420	125	B3-U0-G1	15504	135	B3-U0-G1	15278	133	B3-U0-G1	115
	5Q		14015	122	B4-U0-G2	15069	131	B4-U0-G2	14850	129	B4-U0-G2	
	5R		14229	124	B3-U0-G2	15299	133	B3-U0-G2	15076	131	B3-U0-G2	
	FT		14024	122	B3-U0-G3	15079	131	B3-U0-G3	14859	129	B3-U0-G3	
20L	5C	80	18902	118	B4-U0-G1	20323	127	B4-U0-G1	20027	125	B4-U0-G1	161
	5Q		18372	114	B4-U0-G2	19753	123	B4-U0-G2	19465	121	B4-U0-G2	
	5R		18652	116	B4-U0-G2	20054	125	B4-U0-G2	19762	123	B4-U0-G2	
	FT		18384	114	B3-U0-G3	19766	123	B3-U0-G3	19478	121	B3-U0-G3	
23L	5C	80	20898	113	B4-U0-G2	22469	122	B4-U0-G2	22142	120	B4-U0-G2	184
	5Q		20312	111	B4-U0-G2	21839	119	B4-U0-G2	21521	117	B4-U0-G2	
	5R		20622	113	B4-U0-G2	22172	121	B4-U0-G2	21849	119	B4-U0-G2	
	FT		20325	111	B4-U0-G3	21853	119	B4-U0-G3	21535	117	B4-U0-G3	

\*LEDs are frequently updated therefore values are nominal.

ELECTRICAL DATA*								
Lumen Level	Wattage	120V	208V	240V	277V	347V	480V	
10L	73	0.61	0.35	0.30	0.26	0.21	0.15	
13L	96	0.80	0.46	0.40	0.35	0.28	0.20	
15L	115	0.96	0.55	0.48	0.41	0.33	0.24	
20L	161	1.34	0.77	0.67	0.58	0.46	0.33	
23L	184	1.53	0.89	0.77	0.66	0.53	0.38	

\*Electrical data at 25°C (77F). Actual wattage may differ by +/-10%.

RECOMMENDED LUMEN MAINTENANCE: 10L Direct Mount					
Ambient Temperature °C	Lumen Multiplier				
	Initial	25k hr	50k hr	75k hr	100k hr
0-50°C	100%	96%	91%	87%	83%

RECOMMENDED LUMEN MAINTENANCE: 13L & 15L Direct Mount					
Ambient Temperature °C	Lumen Multiplier				
	Initial	25k hr	50k hr	75k hr	100k hr
0-40°C	100%	95%	91%	86%	82%

RECOMMENDED LUMEN MAINTENANCE: 20L Direct Mount					
Ambient Temperature °C	Lumen Multiplier				
	Initial	25k hr	50k hr	75k hr	100k hr
0-35°C	100%	93%	87%	81%	75%





# High Output Parking Garage HPG

## PHOTOMETRICS

[Back to Quick Links](#)

All published luminaire photometric testing performed to IESNA LM-79 standards by a certified laboratory. For complete specifications and IES files, see website. See <http://www.lsi-industries.com/products/led-lighting-solutions.aspx> for detailed photometric data.

### HPG 23L 5Q 50K8

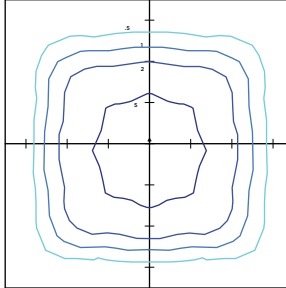
#### Luminaire Data

Square Distribution	
Description	5000 Kelvin, 80 CRI
Delivered Lumens	22,089
Watts	190.7
Efficacy	116
IES Type	Type VS - Short
BUG Rating	B4-U0-G2

#### Zonal Lumen Summary

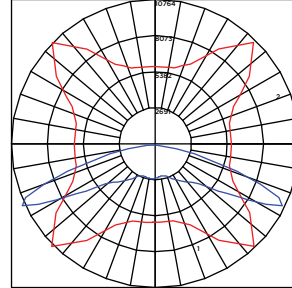
Zone	Lumens	%Luminaire
Low (0-30)°	2187	26.6%
Medium (30-60)°	10245	54.4%
High (60-80)°	9293	17.8%
Very High (80-90)°	365	1.1%
Uplight (90-180)°	0	0.0%
Total Flux	22089	100%

#### ISOFOOT CANDLE PLOT



15' Mounting Height/15' Grid Spacing  
 ■ 5 FC ■ 2 FC ■ 1 FC ■ .5 FC

#### POLAR CURVE



### HPG 23L 5C 50K8

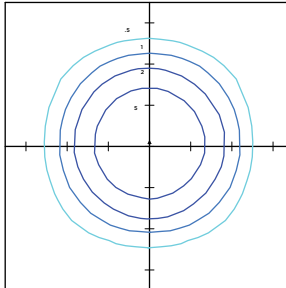
#### Luminaire Data

Concentrated Distribution	
Description	5000 Kelvin, 80 CRI
Delivered Lumens	24,361
Watts	191.5
Efficacy	127
IES Type	Type IV - Short
BUG Rating	B3-U0-G3

#### Zonal Lumen Summary

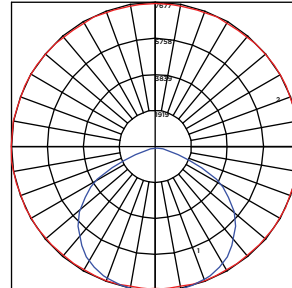
Zone	Lumens	%Luminaire
Low (0-30)°	4368.4	17.9%
Medium (30-60)°	12592.5	51.7%
High (60-80)°	6960.6	28.6%
Very High (80-90)°	439.5	1.8%
Uplight (90-180)°	0.0	0.0%
Total Flux	24361.0	100%

#### ISOFOOT CANDLE PLOT



15' Mounting Height/15' Grid Spacing  
 ■ 5 FC ■ 2 FC ■ 1 FC ■ .5 FC

#### POLAR CURVE



### HPG 23L 5R 50K8

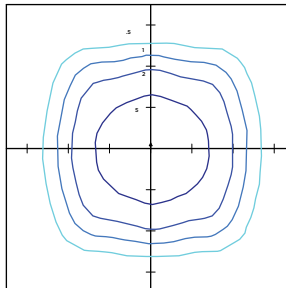
#### Luminaire Data

Rectangular Distribution	
Description	5000 Kelvin, 80 CRI
Delivered Lumens	22,113
Watts	189.9
Efficacy	116
IES Type	Type VS - Short
BUG Rating	B4-U0-G2

#### Zonal Lumen Summary

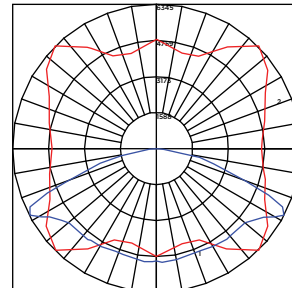
Zone	Lumens	%Luminaire
Low (0-30)°	4159	19%
Medium (30-60)°	11771	53%
High (60-80)°	5944	27%
Very High (80-90)°	239	1%
Uplight (90-180)°	0	0%
Total Flux	22113	100%

#### ISOFOOT CANDLE PLOT



15' Mounting Height/15' Grid Spacing  
 ■ 5 FC ■ 2 FC ■ 1 FC ■ .5 FC

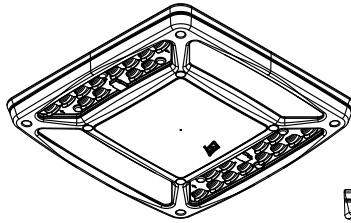
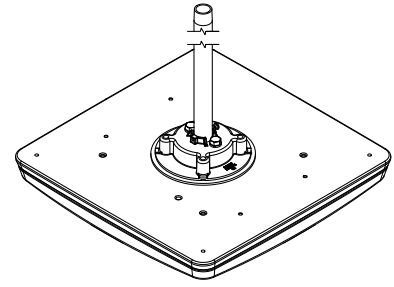
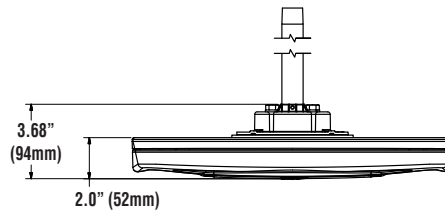
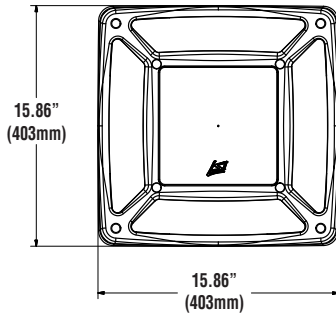
#### POLAR CURVE



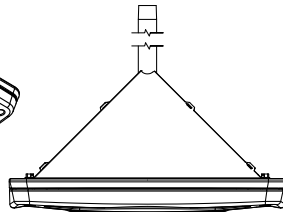


# High Output Parking Garage HPG

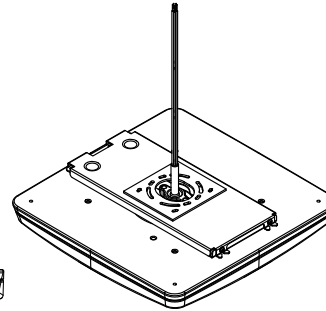
## PRODUCT DIMENSIONS

[Back to Quick Links](#)

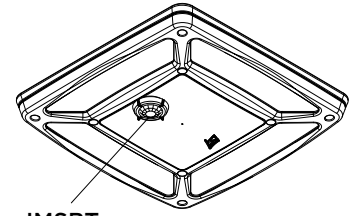
Distribution



Bird Shroud



Direct Mount Accessory



IMSBT Option

## CONTROLS

### AirLink Wireless Lighting Controller

The AirLink integrated controller is a California Title 24 compliant lighting controller that provides real-time light monitoring and control with utility-grade power monitoring. It includes a 24V sensor input and power supply to connect a sensor into the outdoor AirLink wireless lighting system.

The wireless integrated controller is compatible with this fixture.

Click the link below to learn more details about AirLink.

<https://www.lsicorp.com/wp-content/uploads/documents/products/airlink-outdoor-specsheet.pdf>

### Integral Bluetooth™ Motion and Photocell Sensor (IMSBT)

Slim low profile sensor provides multi-level control based on motion and/or daylight. Sensor controls 0-10 VDC LED drivers and is rated for cold and wet locations (-30° C to 70° C). Two unique PIR lenses are available and used based on fixture mounting height. All control parameters are adjustable via an iOS or Android App capable of storing and transmitting sensor profiles.

Click the link below to learn more details about IMSBT.

<https://www.lsicorp.com/wp-content/uploads/documents/products/imsbt-specsheet.pdf>

### AirLink™ Blue

Wireless Bluetooth Mesh Lighting Control System that provides energy savings, code compliance and enhanced safety/security. Three key components; Bluetooth wireless radio/sensor controller, Time Keeper and an App. Capable of grouping multiple fixtures and sensors as well as scheduling time-based events by zone. Radio/Sensor Controller is factory integrated into luminaires.

Click the link below to learn more details about AirLink Blue.

<https://www.lsicorp.com/product/airlink-blue/>

