

Industrial & Parking Garage

LSI WEST

COAST

SUMMIT

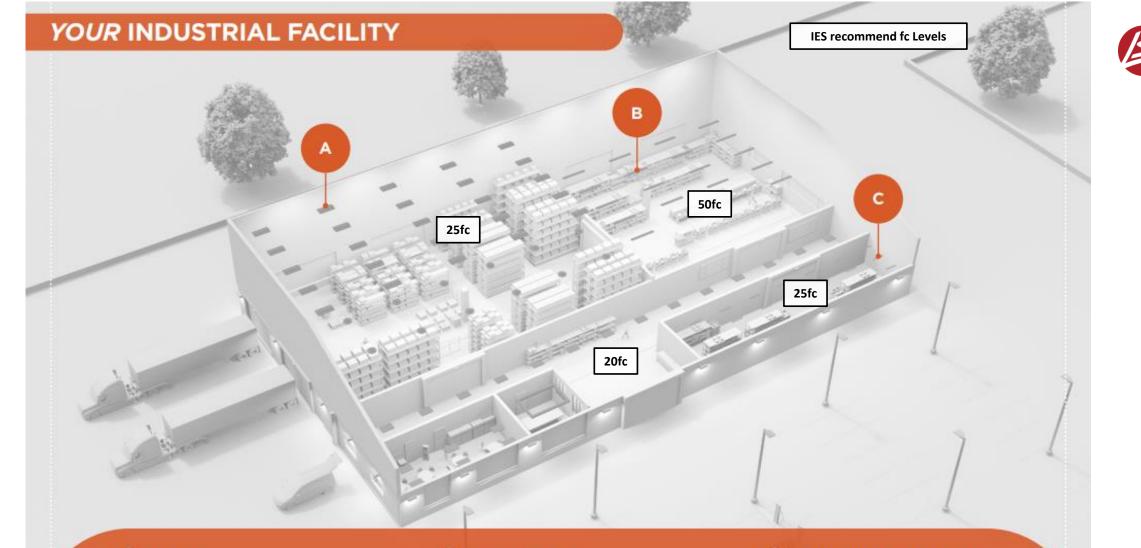
2023

Marc Meyer



Industrial Lighting





A HIGH BAY

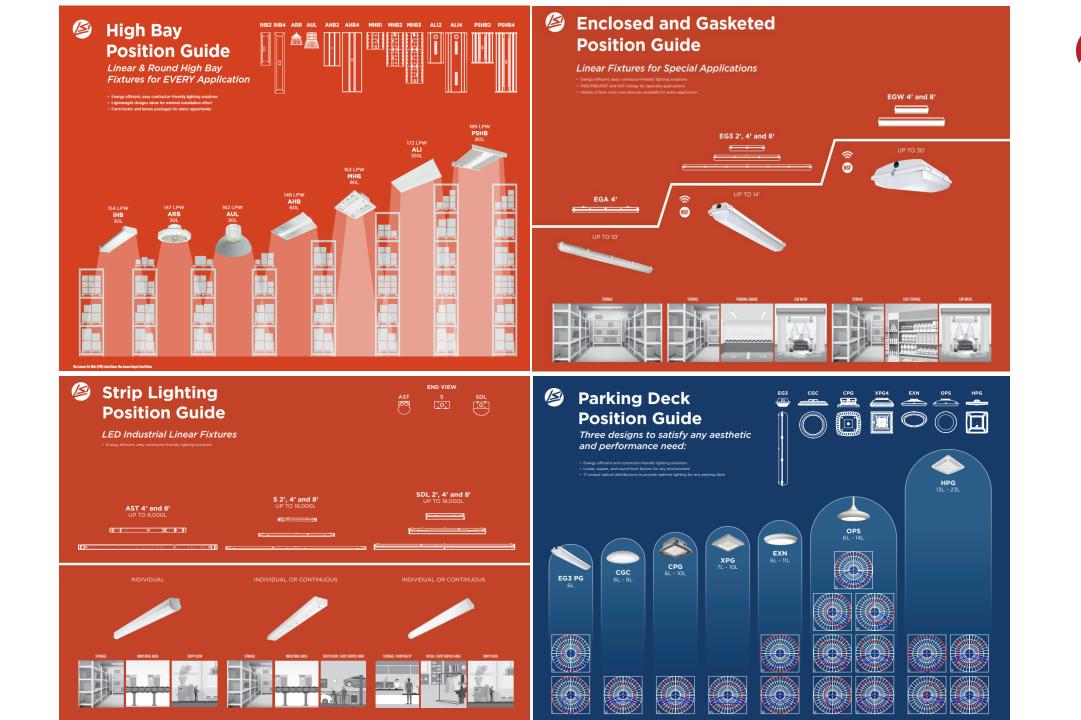
No two facilities are alike. That's why we offer a robust line of linear and round high bay fixtures. With up to 100,000 lumens, available battery backup, numerous control and sensor options, there's a high bay fixture for every application.

B STRIP LIGHTING

Strip lighting provides a flexible, cost effective solution for just about any space, due to its compact design. Available in different lengths, with multiple lumen packages, color temperatures, and mounting options, our lineup of strip lights bring uncompromising utility.

C ENCLOSED AND GASKETED

For harsh environments and speciality applications such as cold storage, our vaportite fixtures get the job done reliably with minimal maintenence. Available in various form factors and with different lens colors and other options, our lineup can meet any challenge.



Certification Definitions



Ingress Protection (IP)

IP R	IP Rating First Number (Solids)				
Level	Description for Solid Foreign Objects	Symbol			
0	No protection	F			
1	Protected against objects > 50mm (hands)	₩.			
2	Protected against objects > 12mm (fingers)	+*			
3	Protected against objects > 2.5mm (tools/wires)	ĭ,			
4	Protected against objects > 1mm (small tools)	17			
5	Protected against dust, limited ingress	X			
6	Totally protected against dust	\fbox			

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		m	n	
	U		P	

evel Description

IP 65 6 = Dust-tight + 5 = Protected against water jets.



IP R	IP Rating Second Number (Liquids)					
Level	Description for Water & Liquid Exposure	Symbol				
0	No protection	Ŧ				
1	Protected against dripping water or condensation	7				
2	Protected against sprays of water 15° from vertical	¥,				
3	Protected against sprays of water 60° from vertical	×				
4	Protected against water splashing and sprayed from all directions	š 7				
5	Protected against low pressure jets of water	Ŧ				
6	Protected against high pressure jets of water	14				
1	Protected against the effects of temporary submersion	*				
8	Protected against full submersion	F o				
9	Protected against jets of water at high pressure, high temperature, and from any direction	F				

*Note: Wet Location rating is not the same as IP rating

Certification Definitions



NSF and Impact Rating (IK)

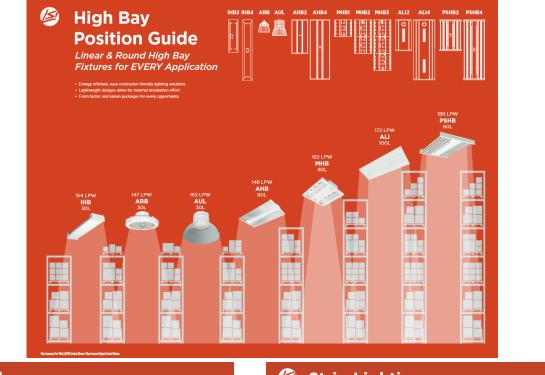
NSF Certifications

NSF Certification	Description of Locations/Use and Commentary	Typical Lighting Applications
Non-Food Zone	Area where direct contact with food products during normal operations would not be expected. Equipment is located outside the normal washdown area. There is a concern that the fixture will add contamination to the protected space or food product (e.g., deanability—will the finish withstand cleaning, chipping paint, deteriorating paints or finishes, lens impact resistance, lamp breakage, etc.).	Kitchens: Food Storage; Dry process area; Damp process areas–no drip possibility
Splash Zone	Area where direct contact with food products during normal operations would not be expected; however, the fixture may be situated such that liquids used in the processing or cleaning procedures, may splash, spill, or otherwise soil—either intentionally or inadvertently—the surface of the fixture. There then is the potential for dripping or draining onto other surfaces or even the process. Since these fixtures are often used in washdown areas. Wet location listing is not sufficient. Fixtures must be tested to withstand high pressure hose washdown. The concerns of Non-Food Zone also apply.	Wet or damp process areas; high pressure purging and/or decontamination used in the process; Areas using hose washdown
Food Zone	Area where direct contact with food products is normally expected and surfaces from which the food may drip, drain, or splash back onto surfaces normally in contact with food. Equipment other than lighting fixtures typically require this certification (e.g. work tables cutting boards, others direct contact equipment).	Category not typically used for lighting

IK Rating Chart

Level	IK01	IK02	IK03	IK04	IK05	IK06	IK07	IK08	IK09	IK10
Weight (g/kg)	200g	200g	200g	200g	200g	500g	500g	5kg	5kg	5kg
Fall Distance (cm)	7.5cm	10cm	17.5cm	25cm	35cm	10cm	20cm	10cm	20cm	40cm
Energy in Joules (J)	0.15 J	0.20 J	0.35 J	0.50 J	0.70 J	1.00 J	2.00 J	5.00 J	10.00 J	20.00 J
Impact	ili G	ili G	ili G	Ğ	G	6	G	KG	KG	КС

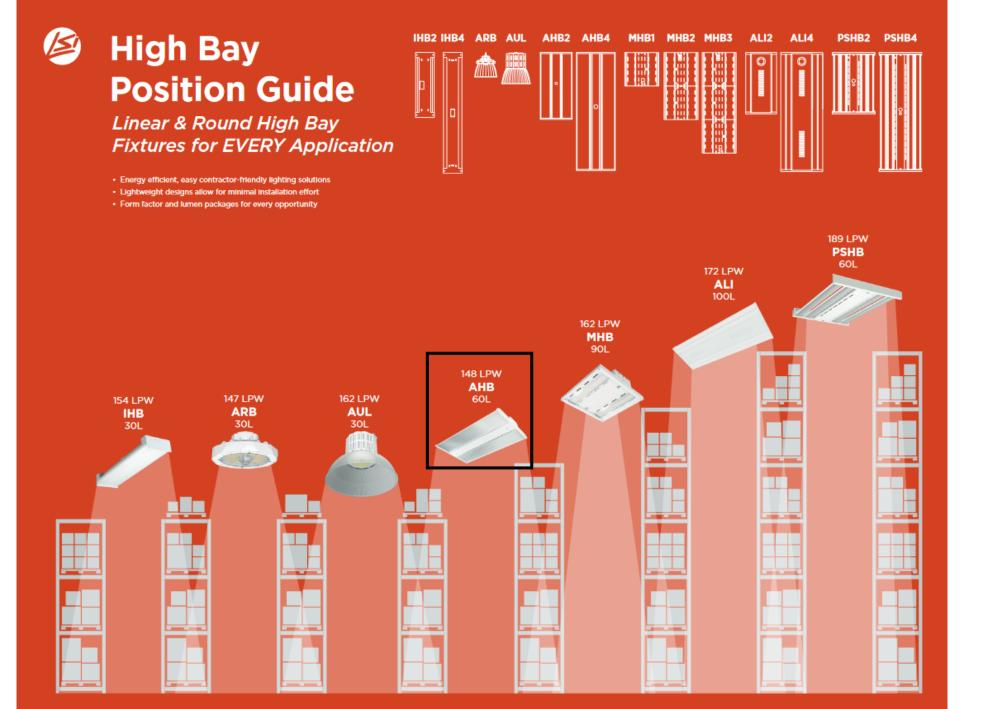
Industrial Overview





<complex-block>





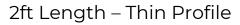
Nax Lumens Per Watt (LPW) Listed Above. Max Lumen Output Listed Below.





AHB Fast Facts

OVERVIEW			
Lumen Package (Im)	18,000 - 60,000		
CCT	4000K, 5000K		
Wattage Range (W)	130 - 440		
Efficacy Range (LPW)	125 - 140		
Weight lbs (kg)	7.2 - 9 (3.3 - 4.1)		





Pendant Mount Box



EM Mounting

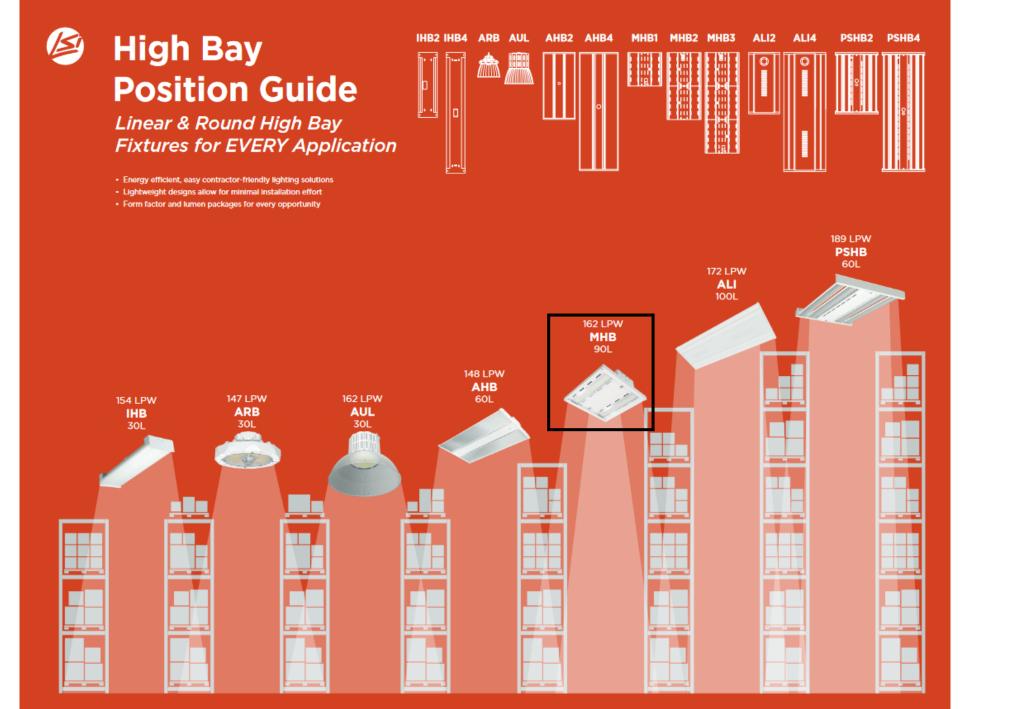


4 ft.





QCMS35 Installed on AHB



Nax Lumens Per Watt (LPW) Listed Above. Nax Lumen Output Listed Below.

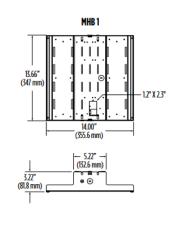
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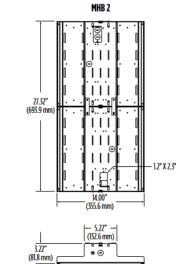


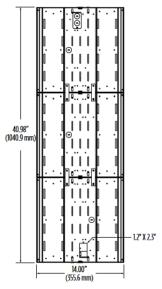
MHB Fast Facts

OVERVIEW			
Lumen Package (Im)	12,000 - 90,000		
Color Temperature (K)	4000K, 5000K		
Wattage Range (W)	79 - 560		
Efficacy Range (LPW)	146 - 162		
Weight lbs (kg)	7.5 - 22.5 (3.3 - 9.9)		









MHB 3

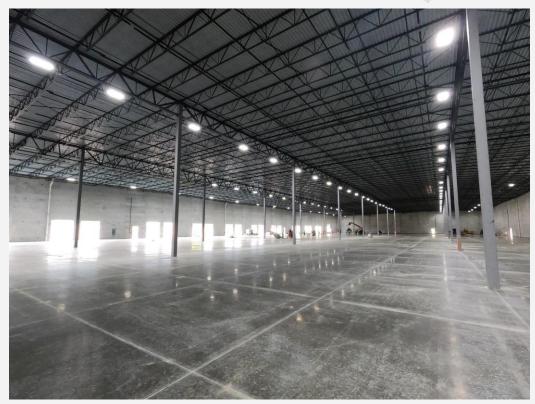


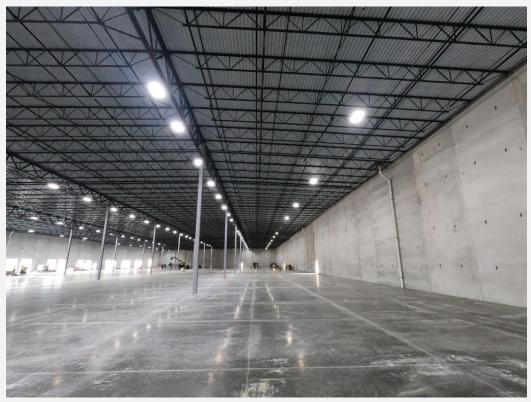


| - <u>5,22</u>" -| (132.6 mm) | 322" (81.8 mm) ______ ● ⊖ °

Pendant Mount Box

MHB Example



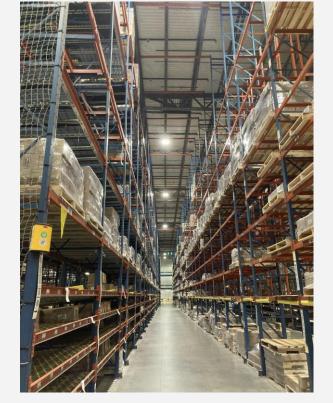


Warehouse new construction (Indianapolis, IN) – August 2021

- (120) MHB 60L 5000K + OMS2 PIR Sensor
- Contractor comment was that installation of MHB was "25% faster than previous jobs with other high bays"

MHB Example

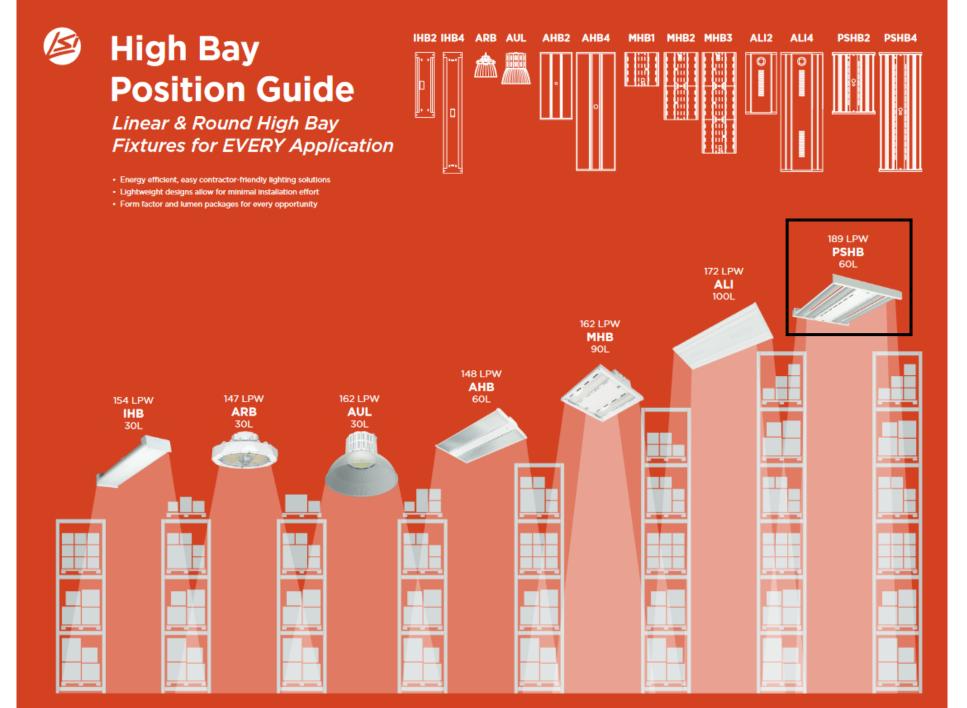




L'oreal Streetsboro, OH

- (353) MHB mixture of Wide and Narrow distribution
- Fixture count went from 596 (before) to 353 (after)





Max Lumens Per Watt (LPW) Listed Above. Max Lumen Output Listed Below.

B



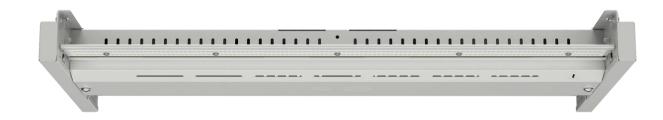
PSHB Fast Facts

OVER	VIEW
Lumen Package (Im)	12,000 - 60,000
Wattage Range (W)	68 - 335
Efficacy Range (LPW)	177 - 189
Weight Ibs (kg)	9.6 - 27.8 (4.3 - 12.6)
Control Options	OMSx, IMSBTxL, ALBC(S), ALSC(S)

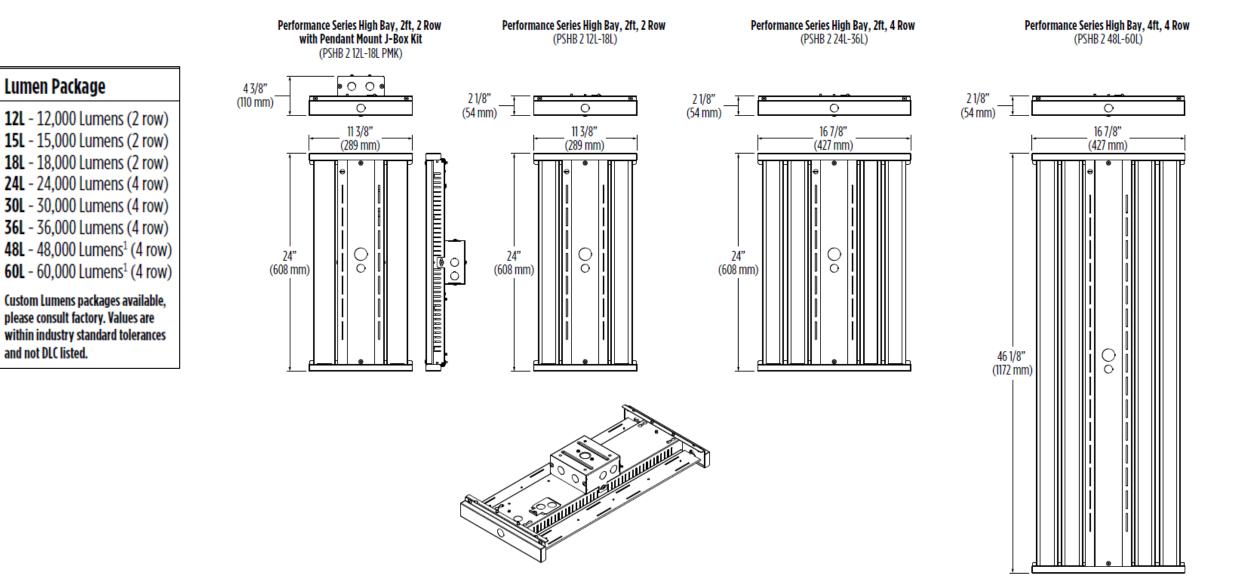


Key Features

- Up to 189 LPW
- Ambient Temp up to 60C (141F)
- Rotatable Optics (D-3-6-9-I)



Peak Series High Bay Dimensions By Lumen Package





Peak Series High Bay

Optical Presets

Optical Presets

D - 0 Degrees - Downlight (Standard)

- 3 30 Degrees Wide³
- 6 60 Degrees Extra Wide³
- 9 90 Degrees Side Light³
- I 180 Degrees Indirect (100% Uplight)²

*Each optic row is rotable in 30 degree increments.

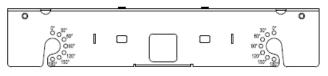
**120, 150 degree presets available as special order. Contact factory for all other customized factory presets

***For 3, 6, or 9 presets, only the outside rows are factory set

*Less Lens not available for presets > 90 degrees



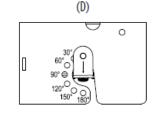


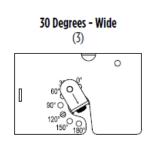




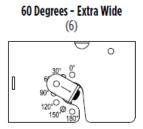


0 Degrees - Downlight (Standard)

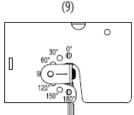




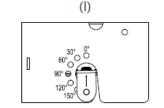
Optical Presets



90 Degrees – Side Light



180 Degrees - Indirect (100% Uplight)







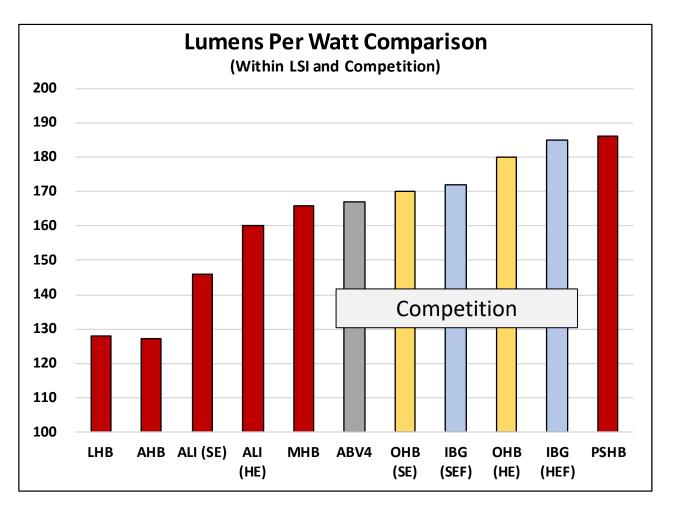
PSHB – Rotatable Optics

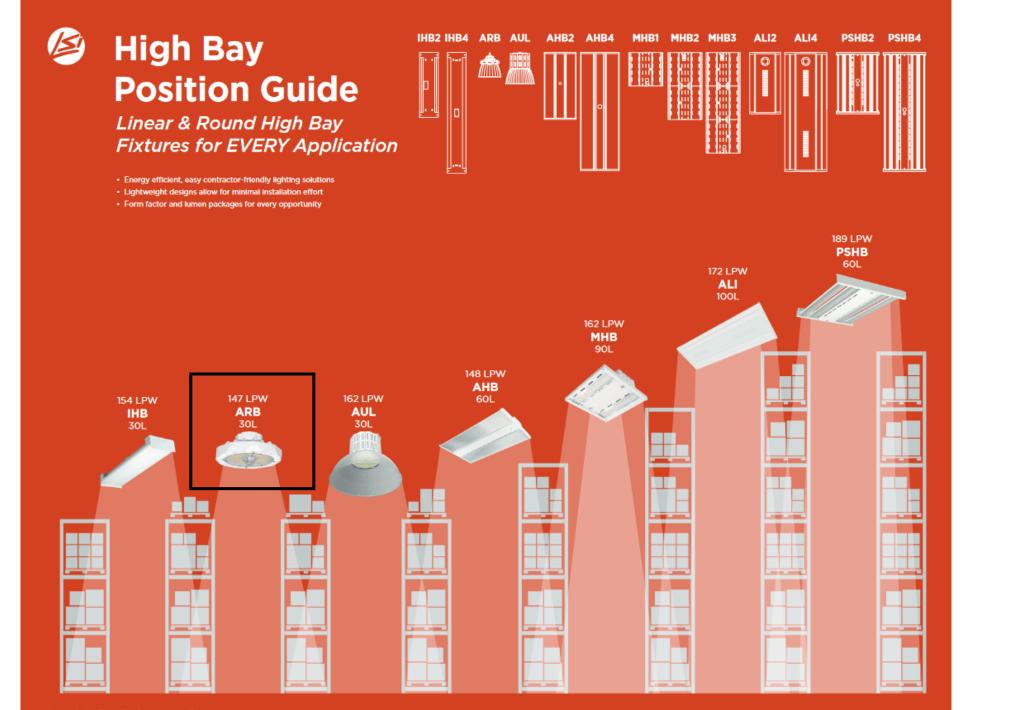


Peak Series High Bay Performance Comparison

30L 5000K No Lens (where applicable)

	Unit	Lumens	Wattage	LPW
	LHB	27,236	213	128
	AHB	27,364	215	127
LSI	MHB	30,370	183	166
LJI	ALI (SE)	29,913	204	146
	ALI (HE)	29,942	187	160
	PSHB	30,774	165	186
Acuity	IBG (SEF)	31,252	182	172
Acuity	IBG (HEF)	31,707	172	185
Cooper	OHB (SE)	30,733	180	170
Cooper	OHB (HE)	30,331	168	180
GE	ABV4	26,680	160	167





Nax Lumens Per Watt (LPW) Listed Above. Nax Lumen Output Listed Below.





ARB Fast Facts

OVERVIEW			
Lumen Package (Im)	18,000 - 30,000		
CCT (K)	4000K, 5000K		
Wattage Range (W)	135 - 240		
Efficacy Range (LPW)	134 - 1 47		
Weight Ibs (kg)	8 (3.6)		



Advantage Round High Bay Black Unit with Hook (ARB BLK) Pictured with standard mounting hook



Advantage Round High Bay White Unit with Loop (ARB WHT ARB-LP) Pictured with optional mounting loop







ARB

ACCESSORY ORDERING INFORMATION





Part Number	Order Number	Description	
787805	PMK BLK	Pendant Mount Adapter (Black)	
787804	PMK WHT	Pendant Mount Adapter (White)	
101170	SCK	Safety Chain Kit	
709938C	R16AC	16" Clear Acrylic Refractor ⁵	
738701	R16AD	16" Diffuse Acrylic Refractor ⁵	
738702	R16AW	16" White Acrylic Refractor ⁵	
782280	R16CPA ¹	16" Acrylic Conical Drop Lens & Clamp Band	
709942	R16WG ¹	16" Wire guard	
782894	ARB-LP ³	Mounting Loop	$\rightarrow 0$
787787	CMS	Center Mount PIR Sensor	



EM Options

EM30WBLK - 30W EM with black box² **EM30WWHT** - 30W EM with white box²



Lumen Package	LPW	EM Lumen Output
18L	147	4,410
24L	139	4,170
30L	135	4,050
Note: 5000K CCT		

Note: 5000K CCT

ARB Examples







Fruit Cove Recreation Club, Fruit Cove FL - Oct 2022

- Covered Pickleball Courts
 - 12 ARB with Acrylic White Refractors

ARB Examples



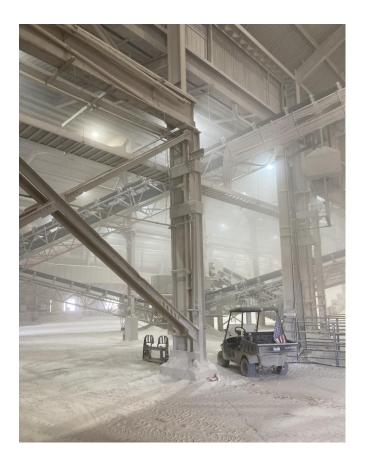




Capital Sands, West VA – December 2022

• ARB installation – IP65 requirement, high mounting height







Aureus Round High Bay (AUL)



OVERVIEW	
Lumen Package	8,000 - 30,000
Wattage Range	49 - 195
Efficacy Range (LPW)	155 - 162
Weight Ibs (kg) - ALI4	8 (3.6)





Keyhole allows Refractors to be installed/exchanged after wiring





AUL Example Costco Before and After









Checkout Lines 1

Wine Area





Jewelry

Checkout Lines 2



Self Checkout

Main Aisle 2

Auto Area



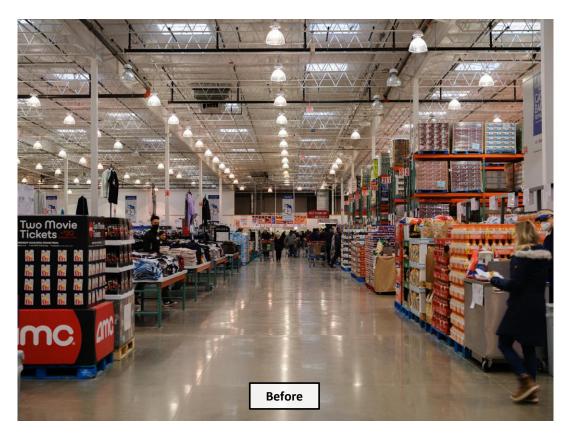
Optical Desk

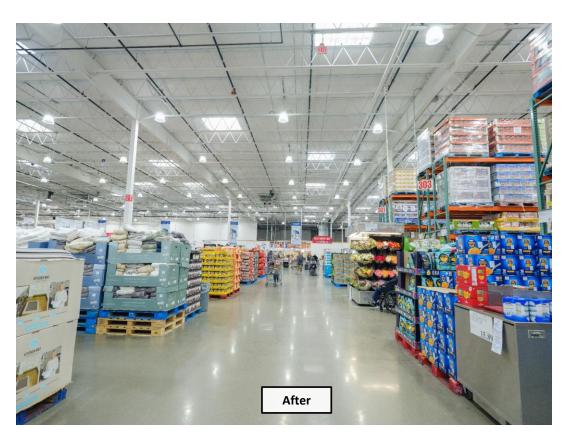


Before and after photos show light output after switching from HID to LED fixtures. Images are captured under similar conditions using consistent camera settings and minimally processed for reproduction.

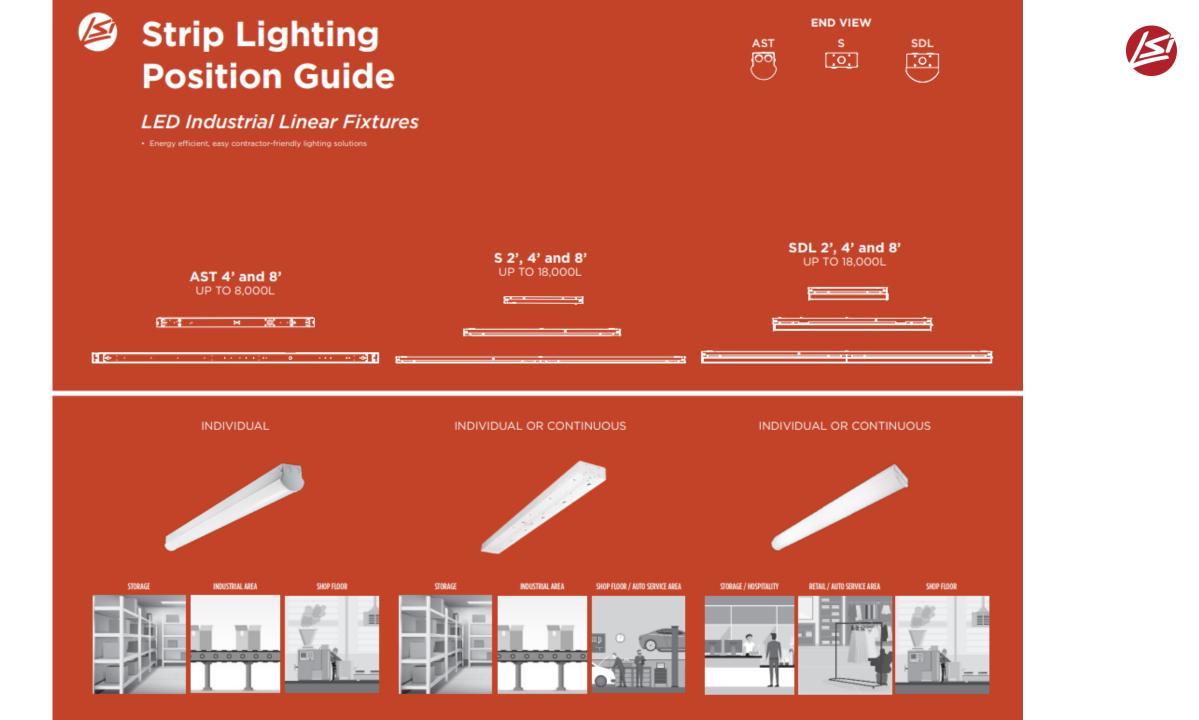


AUL Costco Fort Wayne Before and After





- Costco Store Retrofit (Fort Wayne, IN)
 - Before (Feb '22) and After (Mar '22)
 - 1-for-1 Replacement
- 77 fc levels on the ground dimmed at 70%

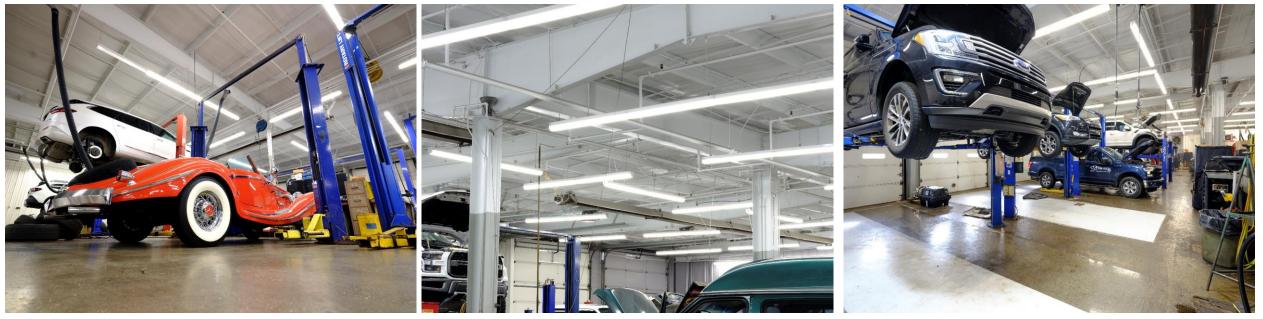


SDL Example

Pearson Automotive (Indianapolis, IN)

- Complete lighting renovation
- Replaced all fluorescent lamp fixtures in all areas, drastically decreasing energy and replacement lamp costs
- Dramatically increased the fc output in the service area for service technicians

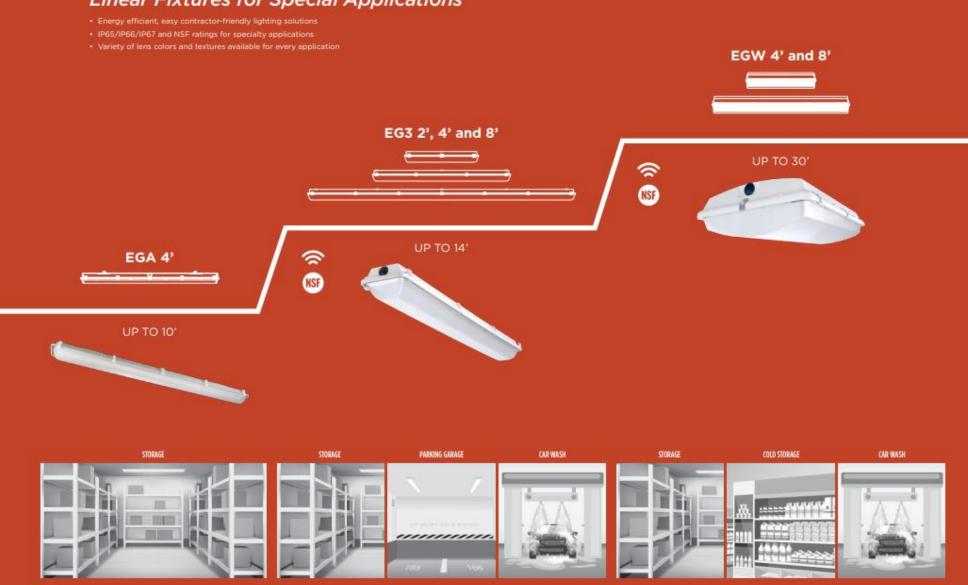




Enclosed and Gasketed Position Guide

Linear Fixtures for Special Applications

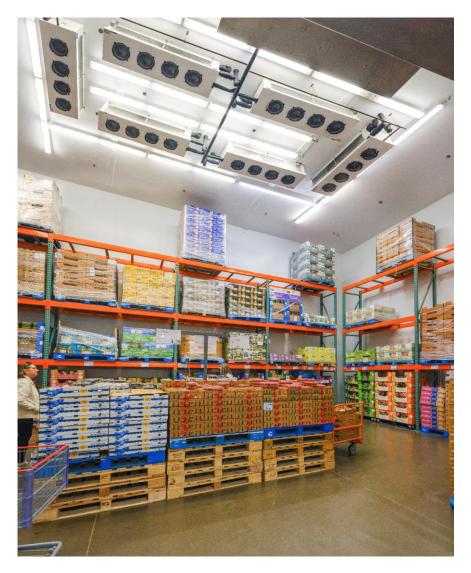




EG3 Example







Costco, Fort Wayne IN

• High Mounting Height, Refrigerated Area

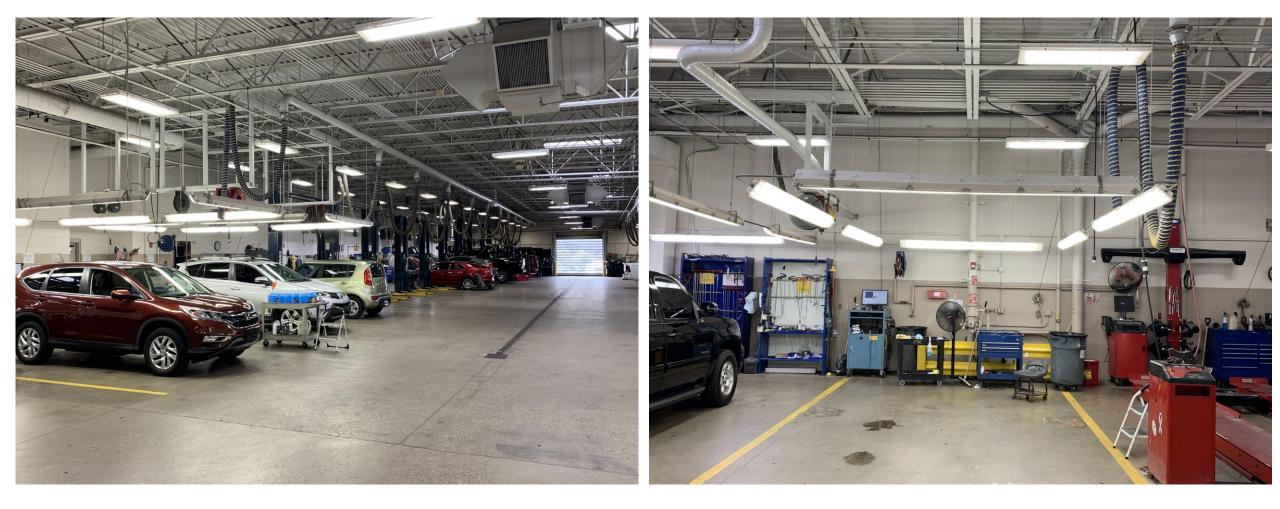


EG3 Example





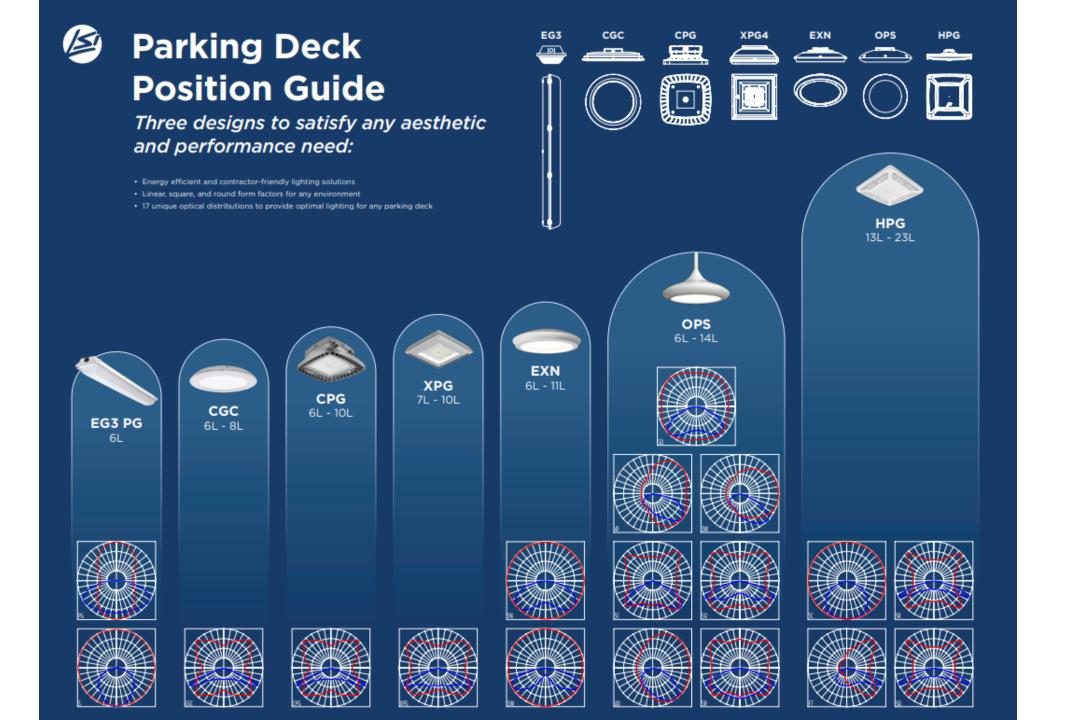
Carmax Service Area, Cincinnati OH





Parking Garage Lighting

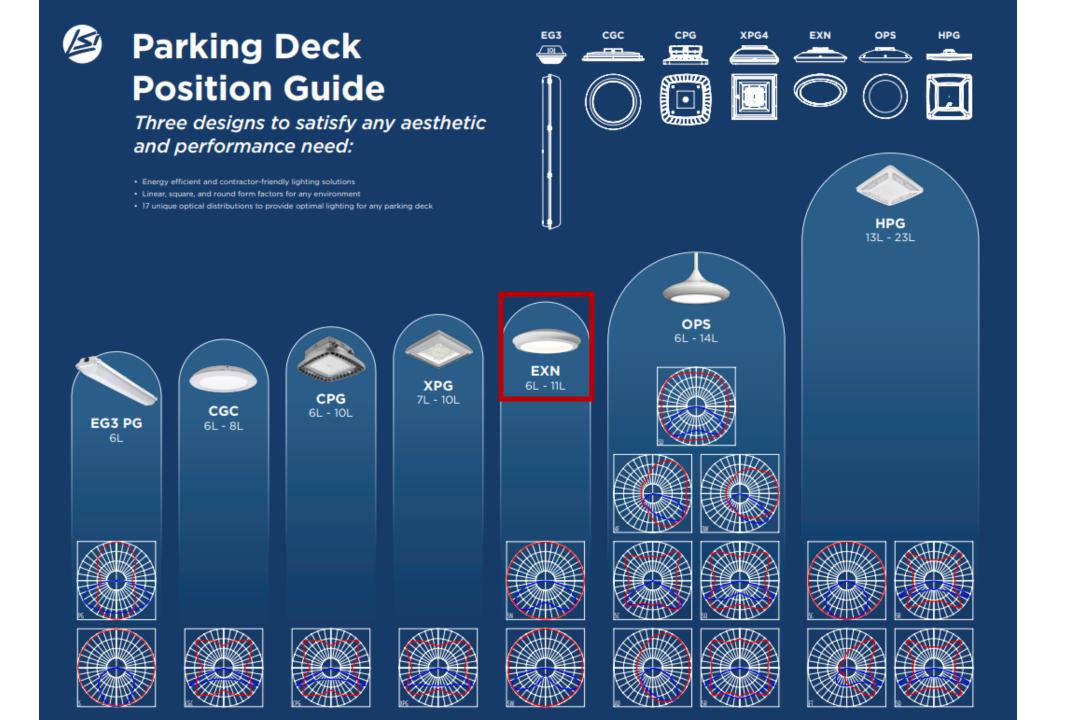




Parking Deck Position Guide















Installation DIRECT MOUNT



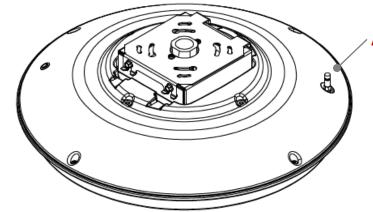






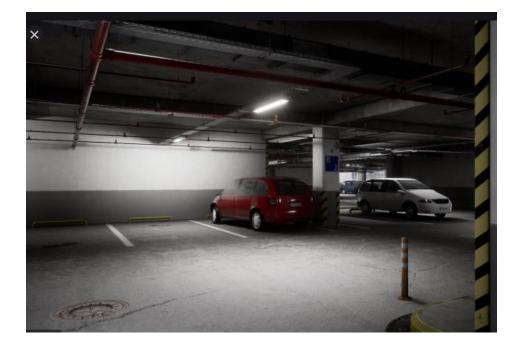


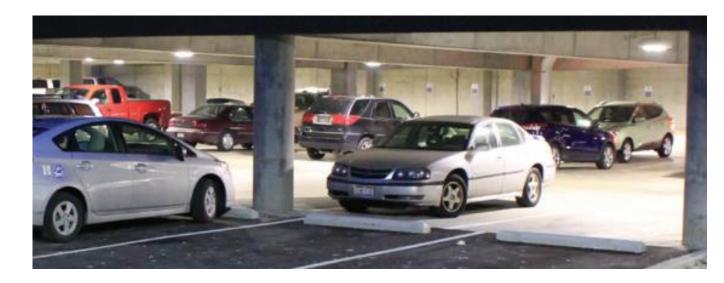
- No effect on distribution
- Dual Sensor (daylight and motion)
- Sensitivity adjustable by smart phone app
- IMSBT1 (8 to 24 feet)
- IMSBT2 (25 to 40 feet)



Antenna for Controls







Cave Effect

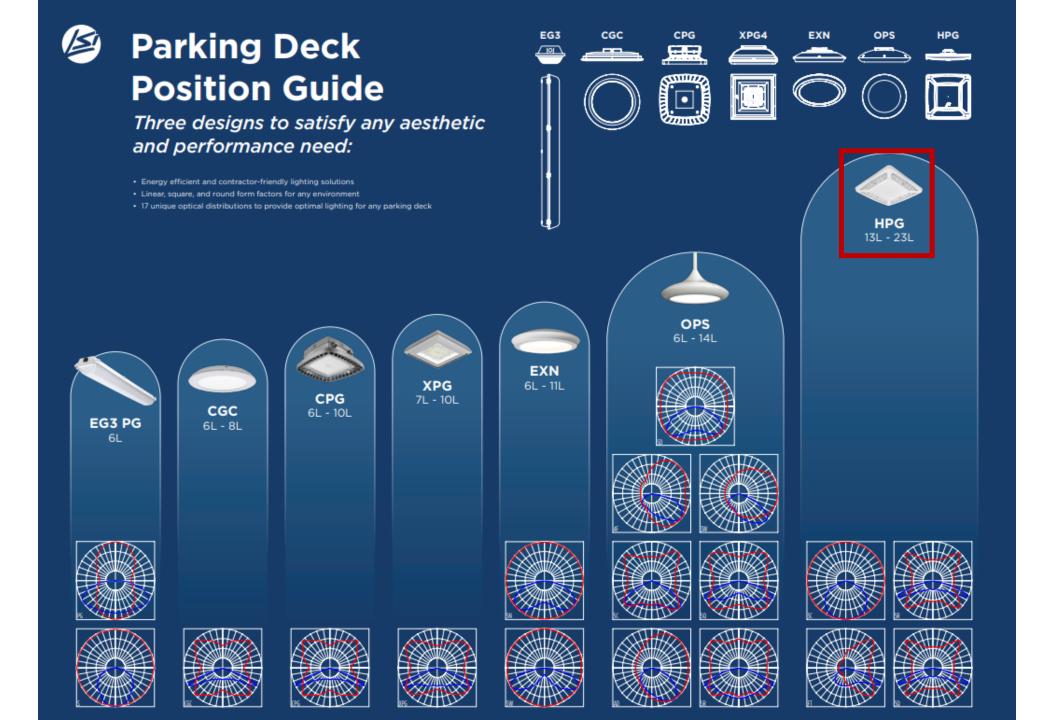
Uplight





- Acrylic Uplight Module
- IP66 Rating
- Powered from existing driver
- Will perform more efficiently than standard fixture

Uplight Delivers ~5% Uplight







High Output Parking Garage (HPG)



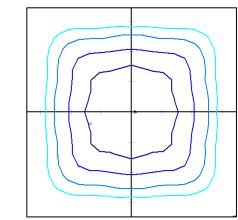
- Direct/Surface Mount or Pendant
- Up to 23,000 lumens
- 4 Distributions
 - Type 5Q (Square)
 - Type 5C (Concentrated)
 - > Type FT (Forward Throw)
 - > Type 5R (Rectangular)
- 120-277V & 347-480V Available
- > 3000K, 4000K & 5000K CCT's @ 80 CRI
- IMSBT & AirLink Wireless Controls

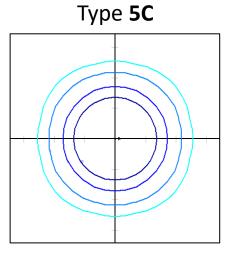




High Output Parking Garage (HPG) - Photometrics

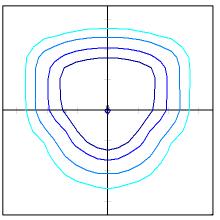
Туре **5Q**



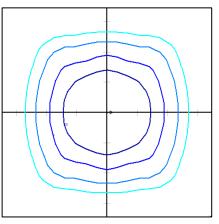








Type **5R**







Questions?

LSI INDUSTRIES WEST COAST SUMMIT - 2023