



**LSI WEST  
COAST  
SUMMIT  
2023**

# Outdoor Lighting

---

Benjamin Peirick  
Sr. Product Manager  
Outdoor Lighting


# 2023 Outdoor Product Portfolio

 **Housing Shapes & Sizes**  
 **Wireless Controls Capability**




## Area/Site





  
3,000 – 14,000 lumens  
Type 3W, 4F, 5Q, 5R, 5C, 5D





  
6,000 – 78,000 lumens  
Type 2, 3, 4, FT, 5W, FTA, AM, LC/RC





  
7,000 – 60,000 lumens  
Type 2, 3, 4, FT, 5W, FTA, AM, LC/RC





  
12,000 – 42,000 lumens  
Type 3, FT, 5W

## Dec./Post





  
3,000 – 14,000 lumens  
Type 3W, 4F, 5Q, 5R, 5C, 5D





  
10,000 – 78,000 lumens  
Type 2, 3, FT, 5W, FTA, AM





  
5,000 – 25,000 lumens  
Type 2, 3, FT, 5W

## Wall Mount





  
3,000 – 14,000 lumens  
Type 3W, 4F, 5Q, 5R, 5C, 5D





  
2,000 – 21,000 lumens  
Type 2, 3, 4, FT





  
2,000 – 8,000 lumens  
FT, UD





  
3,000 – 42,000 lumens  
Type 3, FT

## Flood





  
3,000 – 7,000 lumens  
HF, MF, VF, SP, NF, WF





  
60,000 – 105,000 lumens  
2x2, 3x3, 4x4, 5x5





  
1,000 – 50,000 lumens  
4x4, 6x6, 7x7





  
12,000 – 42,000 lumens  
4x4, 6x6

## Low Level





  
1,000 – 2,000 lumens  
SP, NF, MF





  
2,000 – 3,000 lumens  
Symmetric, Asymmetric





  
1,000 – 2,000 lumens  
Symmetric





  
2,000 – 4,000 lumens  
Symmetric

## Garage/Soffit





  
3,000 – 14,000 lumens  
Type 3W, 4F, 5Q, 5R, 5C, 5D




  
3,000 – 11,000 lumens  
Type 5W, 5N





  
10,000 – 23,000 lumens  
Type 5Q, 5C, 5R, FT





  
3,000 – 10,000 lumens





  
4,000 – 8,000 lumens

## Canopy





  
10,000 – 23,000 lumens  
Symmetric, Forward Throw





  
5,000 – 22,000 lumens  
Symmetric, Asymmetric




  
8,000 – 20,000 lumens



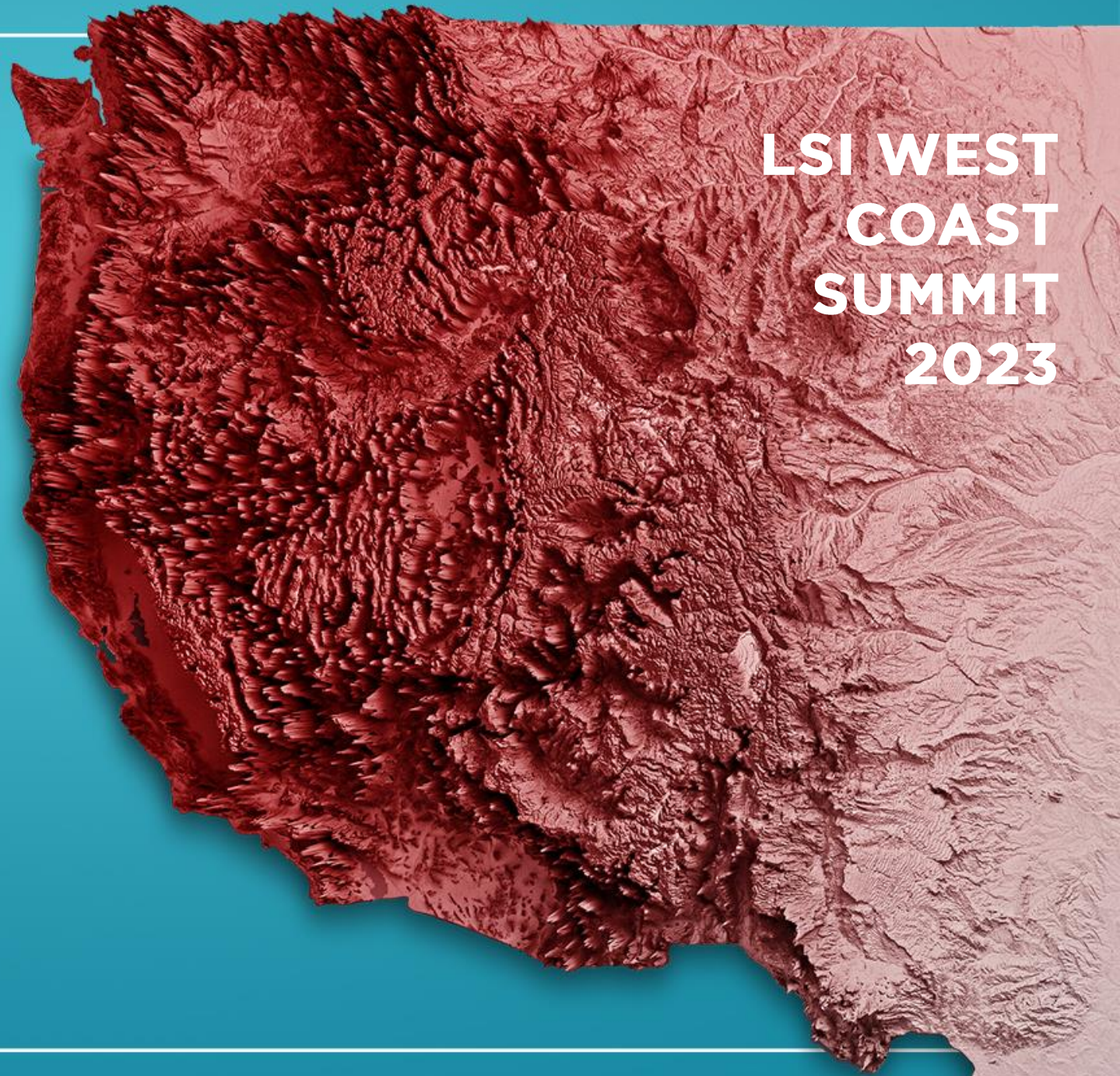

  
4,000 – 8,000 lumens



**LSI WEST  
COAST  
SUMMIT  
2023**

# Opulence

Series of Luminaires



# O pulence Series of Luminaires



**Post Top**



**Side Arm**



**Pendant**



**Wall Mount**



**Surface/Direct**





# Family Overview



- Clean Architectural Styling
- Smaller Size w/Visual Comfort Optics that are Ideal for Pedestrian Scale Applications
- 7 Standard Lumen Packages (3,000 - 14,000 Lumens)
- 5 Standard CCTs (2700K-5000K) @ 80 CRI
- Programmable Drivers w/Custom Lumen Outputs
- 7 Distributions (Type 5Q, 5C, 5R, 3W, 4F, 5D, AD)
- IP66 Rated Luminaire
- Optional Wireless and Stand-Alone Controls
- Consistent Appearance Regardless of Mounting



# Design

## Flowing Form

- Smooth transition regardless of mounting
- Clean housing design with no heat fins
- Styling complements surroundings
- Well hidden hardware



## Superior Visual Comfort

- Large Aperture Lens
- Dense Recessed LED Array
- Optional Diffuse Lens
- Low Lumen Outputs Available

## Ease of Controls



- Integral to Luminaires
- Standalone or Mesh Network
- Simple to use Software and Apps
- Pre-Commissioned Solutions Available

## Unmatched Performance

- True IES Distributions
- Very High Efficacy LEDs
- Programmable Drivers
- IP66 Rated Luminaire

**5 Standard CCT's  
at 80 CRI**



**8 Standard Paint Finish  
Custom Colors Available**



LSI INDUSTRIES WEST COAST SUMMIT - 2023

# Distributions

*Standard Optics (Clear Lens)*

**3W** – Type 3 Wide Throw (*Area/Pathway/Roadway Dist.*)

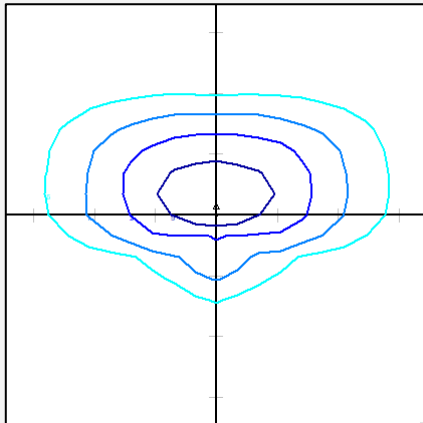
**4F** – Type 4 Forward Throw (*Perimeter/Area Distribution*)

**5Q** – Type 5 Square (*Area/Symmetrical Distribution*)

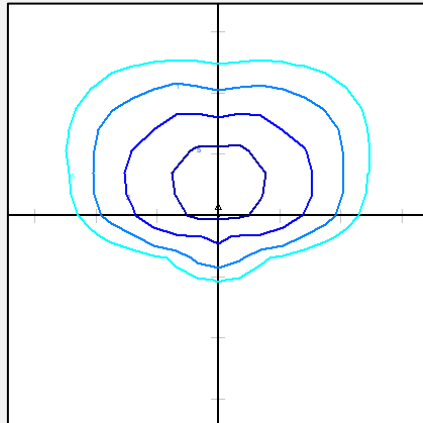
**5C** – Type 5 Concentrated (*Entryway/Symmetrical Dist.*)

**5R** – Type 5 Rectangular (*Wide Pathway Distribution*)

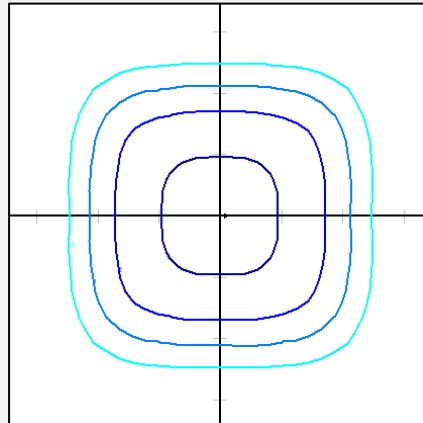
**Type 3W**



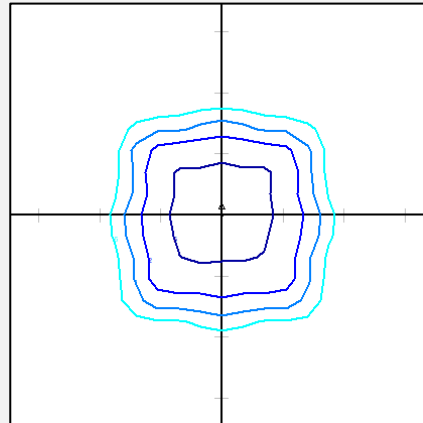
**Type 4F**



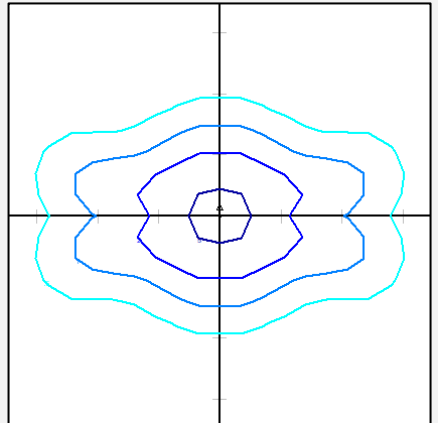
**Type 5Q**



**Type 5C**



**Type 5R**





# Distributions

*Standard Optics (Clear Lens)*

**3W** – Type 3 Wide Throw (*Area/Pathway/Roadway Dist.*)

**4F** – Type 4 Forward Throw (*Perimeter/Area Distribution*)

**5Q** – Type 5 Square (*Area/Symmetrical Distribution*)

**5C** – Type 5 Concentrated (*Entryway/Symmetrical Dist.*)

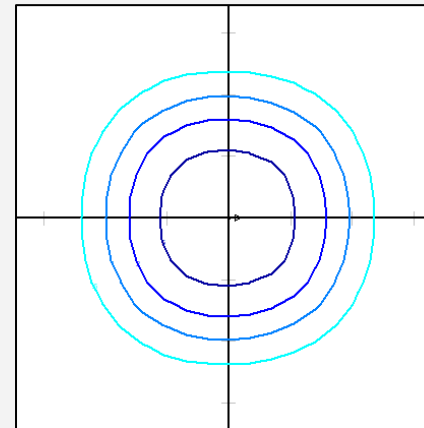
**5R** – Type 5 Rectangular (*Wide Pathway Distribution*)

*Optics w/Diffuse Lens*

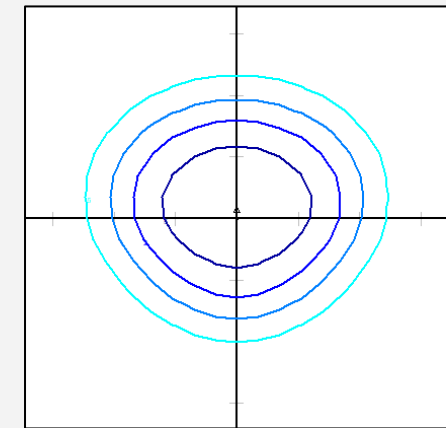
**5D** – Symmetric Distribution

**AD** – Asymmetric Distribution

**Type 5D**



**Type AD**







# External Shielding

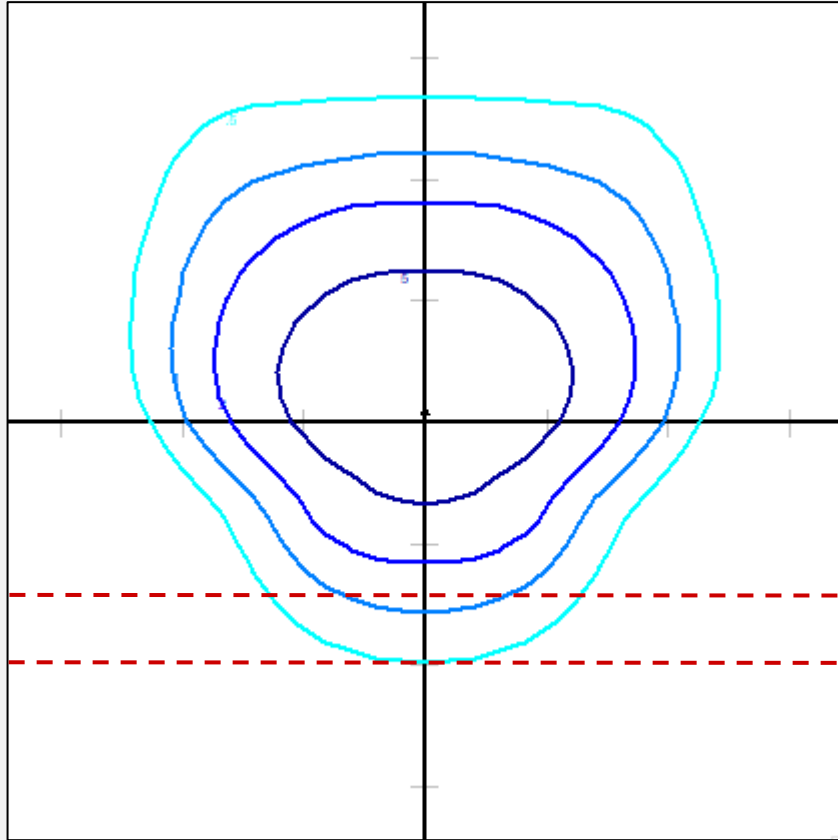


- Available for post top & ceiling mount versions
- Field installation only
- Black paint finish
- Blocks visibility of LEDs from one side
- Virtually no impact on forward distribution
- Moderate impact on back light distribution

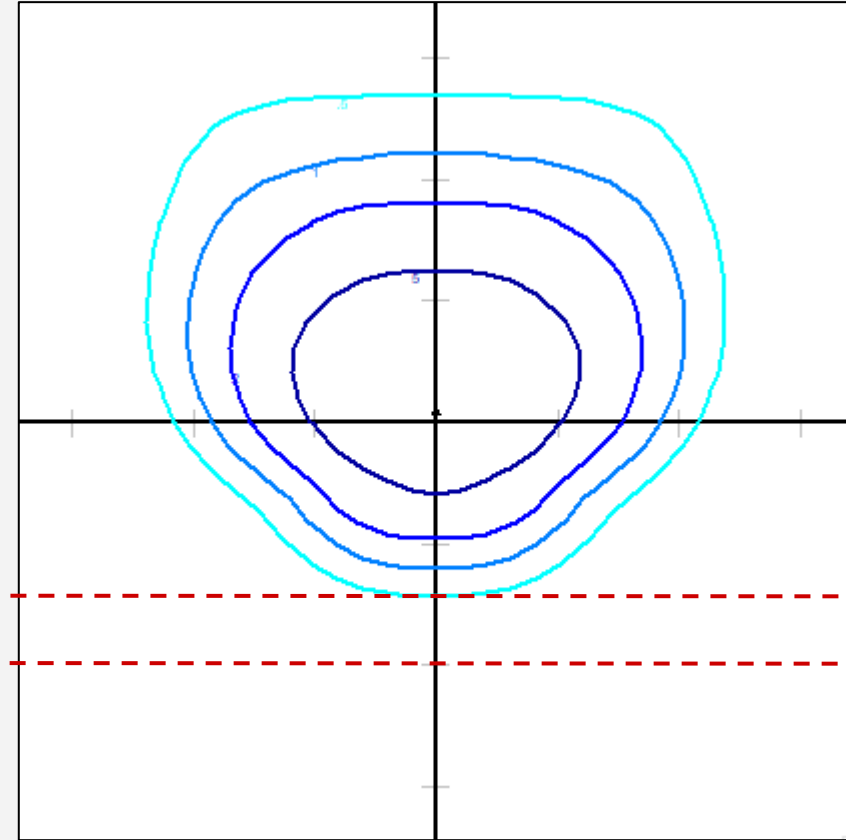


# Opulence External Shield – Photometrics

## Type 4F



## Type 4F w/Shield



**1.5 MH**  
**2.0 MH**

*OPS 14L 4F 40 with & w/out EHS (5.0, 2.0, 1.0, 0.5 FC)*



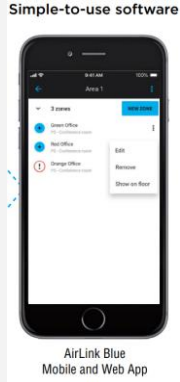
# Visual Comfort & Performance



High density LED array offers the best of both worlds with high precision optics and uniform lens aperture

# Controls

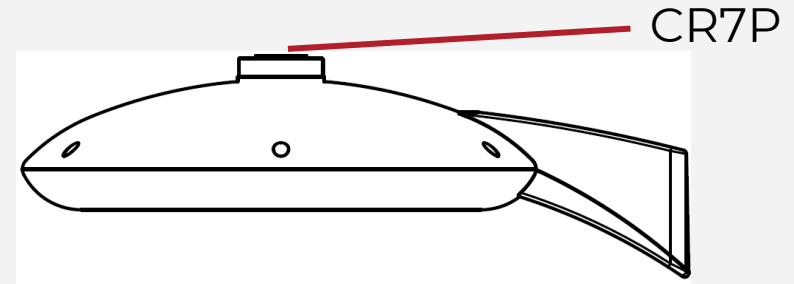
## Wireless Controls



AirLink™ Blue

BlueTooth Mesh Network  
Motion and/or Daylight  
Adjustable via App

## 7-Pin Receptacle



ANSI C136.41-2013 for  
Twist Lock Photocontrols &  
Wireless Control Modules

## Standalone Bluetooth Sensor



Independent Operation Motion  
and/or Daylight Adjustable via App



IMSBT





**LSI WEST  
COAST  
SUMMIT  
2023**

# Opulence

Post Top



# Post Top





# Post Top Overview



- Stylish Twin Cast Aluminum Arms
- Standard Luminaire Mounts to 2" or 3" Nominal OD Tenon
- Virtually Seamless Mounting to 4" Round Pole with Flush Mount Option
- Optional Spun Aluminum Base Cover
- Compatible w/Twin Post Top & Wall Mount Brackets
- Contemporary Tapered Pole & Base Cover Available



Flush Mount



Spun Aluminum  
Base Cover



Twin Post Top  
& Wall Brackets

Contemporary  
Pole & Base  
Cover





# LPW and CCT Review



Lumen Pkg.	3L Im	5L Im	6L Im	8L Im	10L Im	12L Im	14L Im
<b>Wattage</b>	20	34	41	55	70	85	100
<b>LPW</b>	145	140	141	139	137	135	133

Above results from 5000K with 5Q distribution (OPS PT 5Q 50K8 WHT)



# Competitive Comparison – Small/Ped Scale Area Lights



	5 IES Distributions	Up to 14,000 Lumens	Up to 140 LPW	<25 lbs.	5 CCT's w/80 CRI Standard	Side Arm, Wall & Ceiling Mount
						
						
						
						
						
						
						







**LSI WEST  
COAST  
SUMMIT  
2023**

# Opulence

Side Arm Pole Mount



# Side Arm Pole Mount Overview



- Low Profile Upswept Arm for Timeless Aesthetic
- Mounts to Round or Square Pole
- Utilizes LSI's **B2 Drill Pattern**
- Decorative Mounting Options Available via Pendant Mount



Spun Aluminum  
Base Cover



Round or  
Square Pole



Contemporary Pole  
& Base Cover



# LPW and CCT Review



Lumen Pkg.	3L Im	5L Im	6L Im	8L Im	10L Im	12L Im	14L Im
<b>Wattage</b>	20	34	41	55	70	85	100
<b>LPW</b>	159	157	157	155	152	150	148

*Above results from 5000K with 4F distribution (OPS 4F 50K8)*

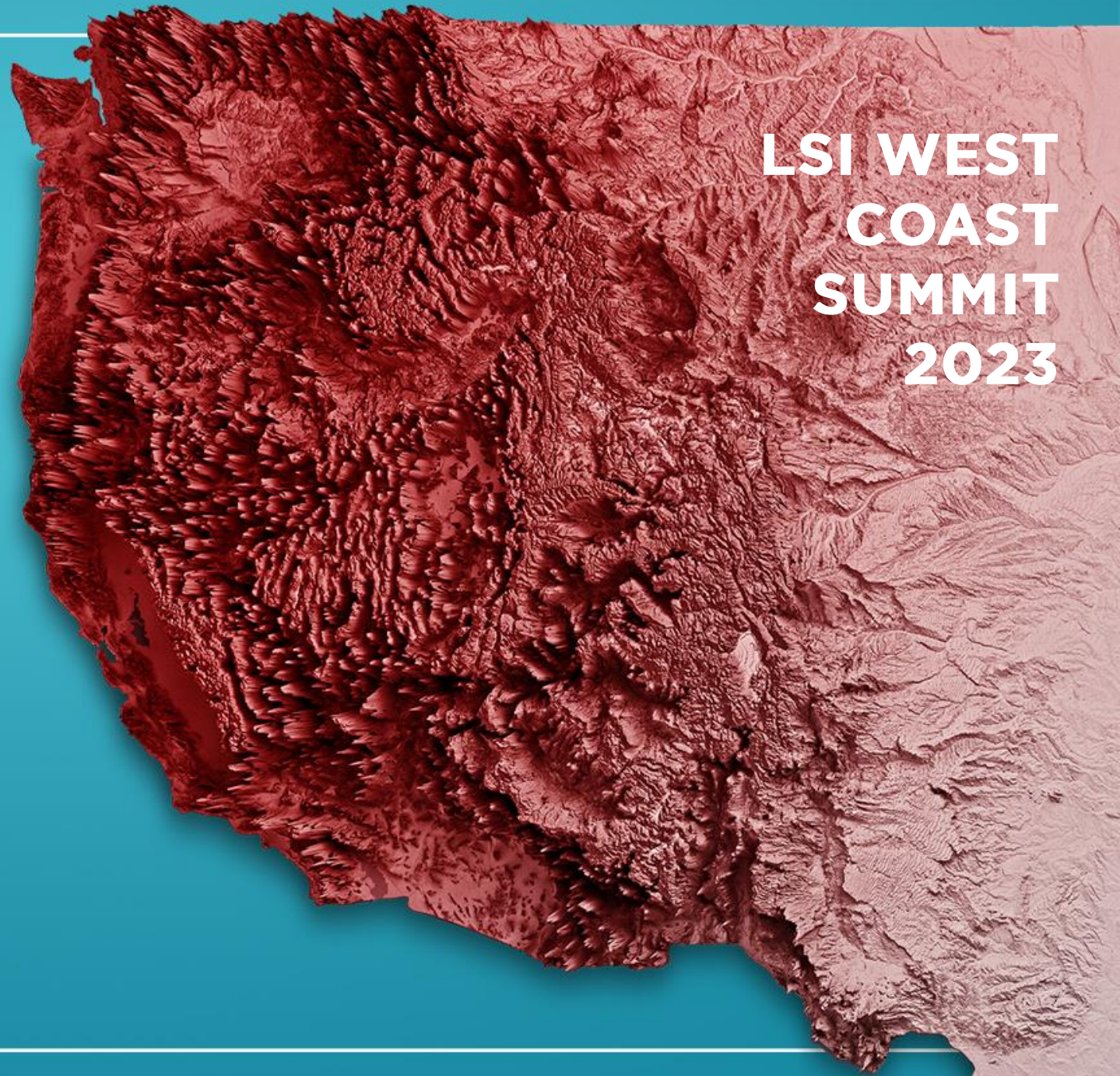




**LSI WEST  
COAST  
SUMMIT  
2023**

# Opulence

Pendant, Surface & Wall  
Mount Versions







# Pendant & Surface Mount Overview



- Mounts to  $\frac{3}{4}$ " Rigid Stem
- Decorative Shroud Available (Painted or Translucent)
- Optional Uplight Module delivers ~5-10% Uplight
- Optional 2" Stem Adapter for Decorative Arms



# Pendant & Surface Mount Overview



- Mounts to  $\frac{3}{4}$ " Rigid Stem
- Decorative Shroud Available (Painted or Translucent)
- Optional Uplight Module delivers ~5-10% Uplight
- Optional 2" Stem Adapter for Decorative Arms
- Hinged 16ga galvanized mounting bracket provided for ease of installation and maintenance
- Universal Mounting Plate Mounts Directly to Horizontal Surface or 4" Junction Box



# Pendant & Surface Mount Overview

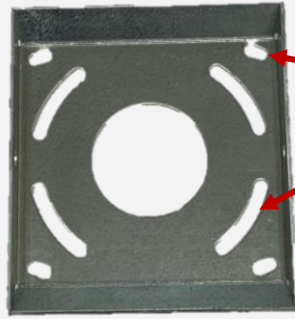


- Mounts to  $\frac{3}{4}$ " Rigid Stem
- Decorative Shroud Available (Painted or Translucent)
- Optional Uplight Module delivers ~5-10% Uplight
- Optional 2" Stem Adapter for Decorative Arms
- Hinged 16ga galvanized mounting bracket provided for ease of installation and maintenance
- Universal Mounting Plate Mounts Directly to Horizontal Surface or 4" Junction Box
- Sleek Wall Arm Covers Standard J-box with Minimal Depth from Mounting Surface
- Universal Mounting Plate Mounts Directly to Vertical Surface or 4" Junction Box
- Wet Location Rated Surface Wiring Box Accessory Available
- Integral Battery Backup (0° & -20°C)

# Wall Mounting

## J-Box Wall Mount

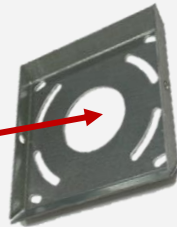
Quick Mount Plate



Mounting provisions for junction box or direct wall mount

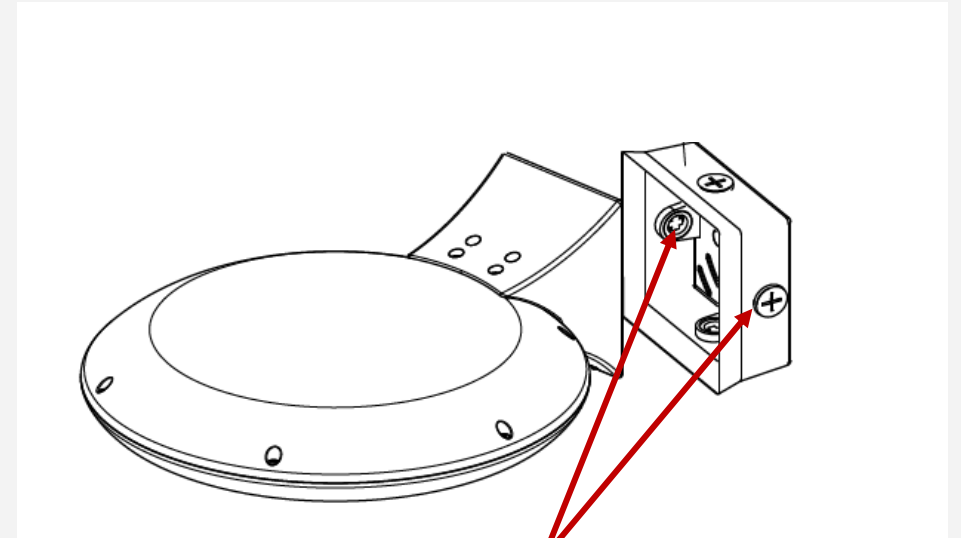


Secured with two well hidden set screws



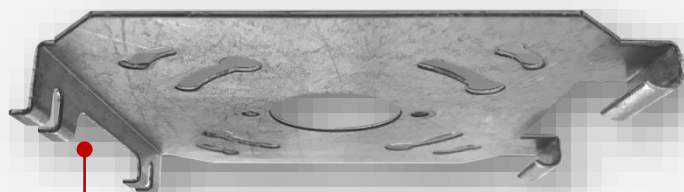
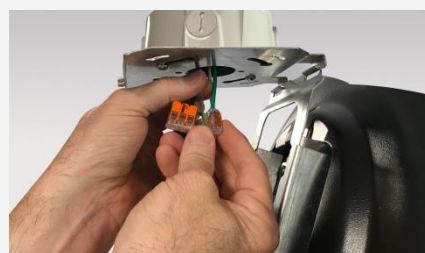
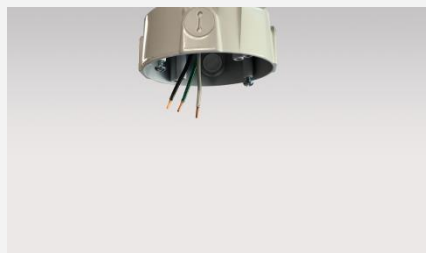
Luminaire hangs from quick mount plate

## Conduit Hubs



1/2" threaded hubs for surface conduit & field installation of button photocell

# Ceiling Mounting



## Junction Box Plate

- Detaches from luminaire mounting bracket
- Attaches to Junction box
- Secures fixture while make wiring connections





# Pendant Mount

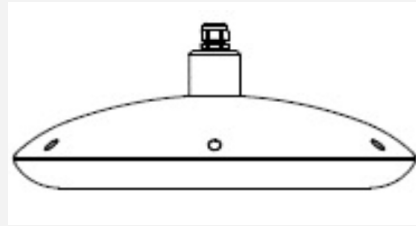
6" - 60" Stem



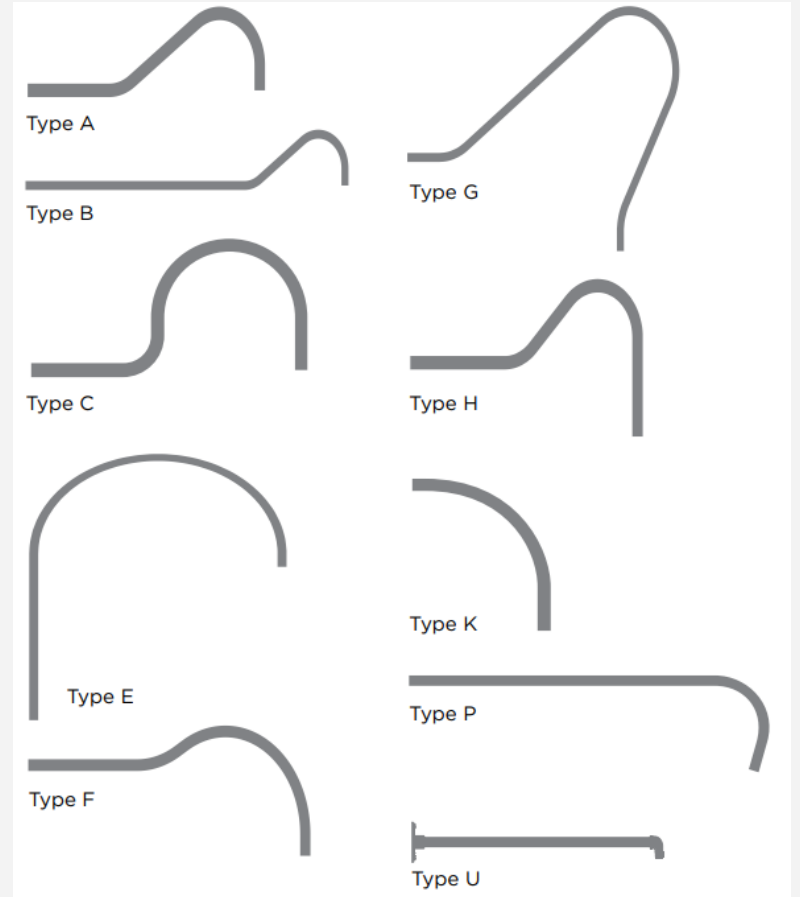
w/Decorative Shroud



2" Tenon Adapter



Gooseneck Brackets



Decorative Box Cover Aligners



Pole Top Brackets



Contemporary Wall Bracket





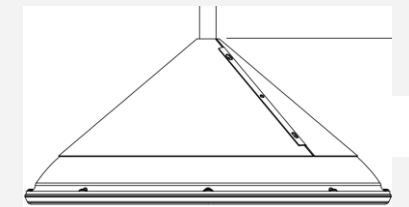
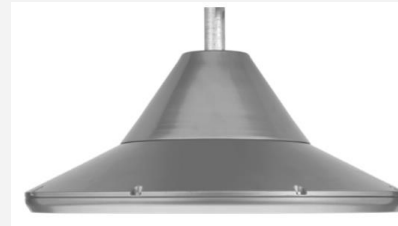
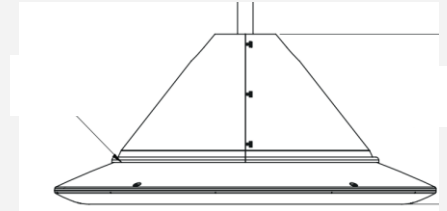


# Parking Garage Mounting Comparison

## Opulence Shroud



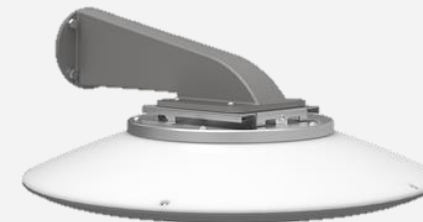
## Competitor Shrouds



## Opulence Wall Mount Arm



## Competitor Wall Mount Arms







# LPW and CCT Review



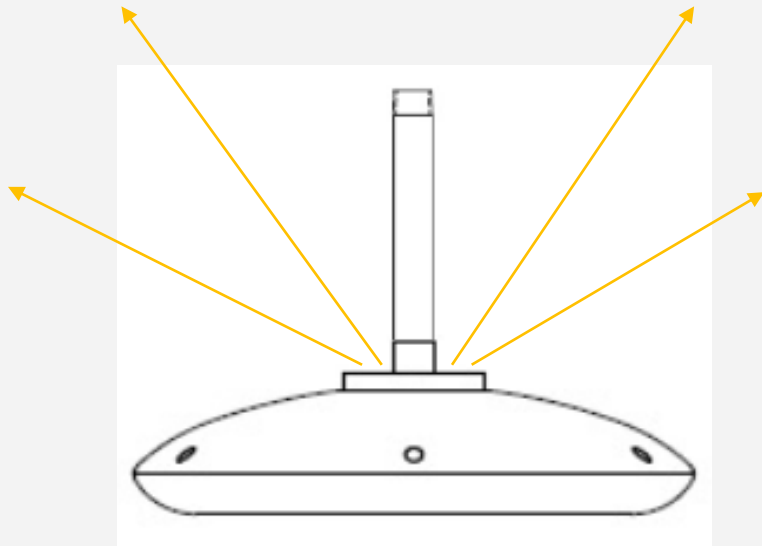
Lumen Pkg.	3L Im	5L Im	6L Im	8L Im	10L Im	12L Im	14L Im
<b>Wattage</b>	20	34	41	55	70	85	100
<b>LPW</b>	159	156	156	154	151	149	147

Above results from 5000K with 5Q distribution (OPS 5Q 50K8)

# Uplight

- Provides approximately 5 or 10% uplight (3.5% or 7% with shroud)
- Compatible with translucent decorative shroud
- Eliminates cave effect and creates a more inviting environment
- Reduces light contrast between luminaire and ceiling

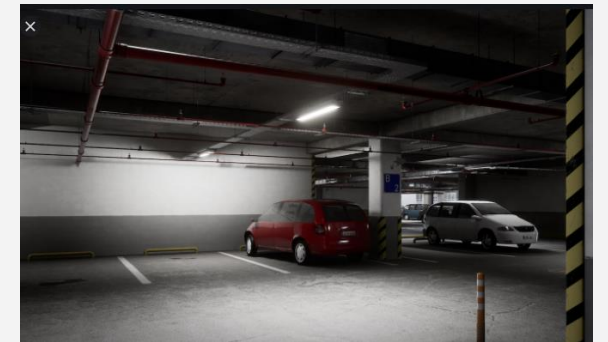
## Uplight Module



**Garage w/ Adequate Uplight**



**Garage w/out Adequate Uplight**





**LSI WEST  
COAST  
SUMMIT  
2023**

# Mirada

Family of Luminaires



# Family of Luminaires



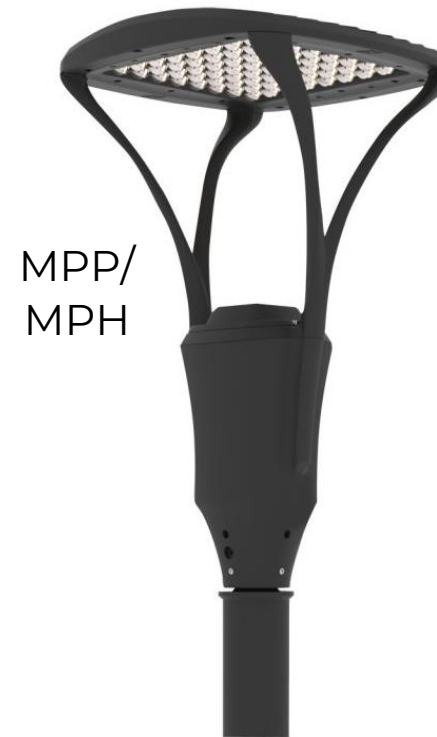
## Mirada Area



## Mirada Wall



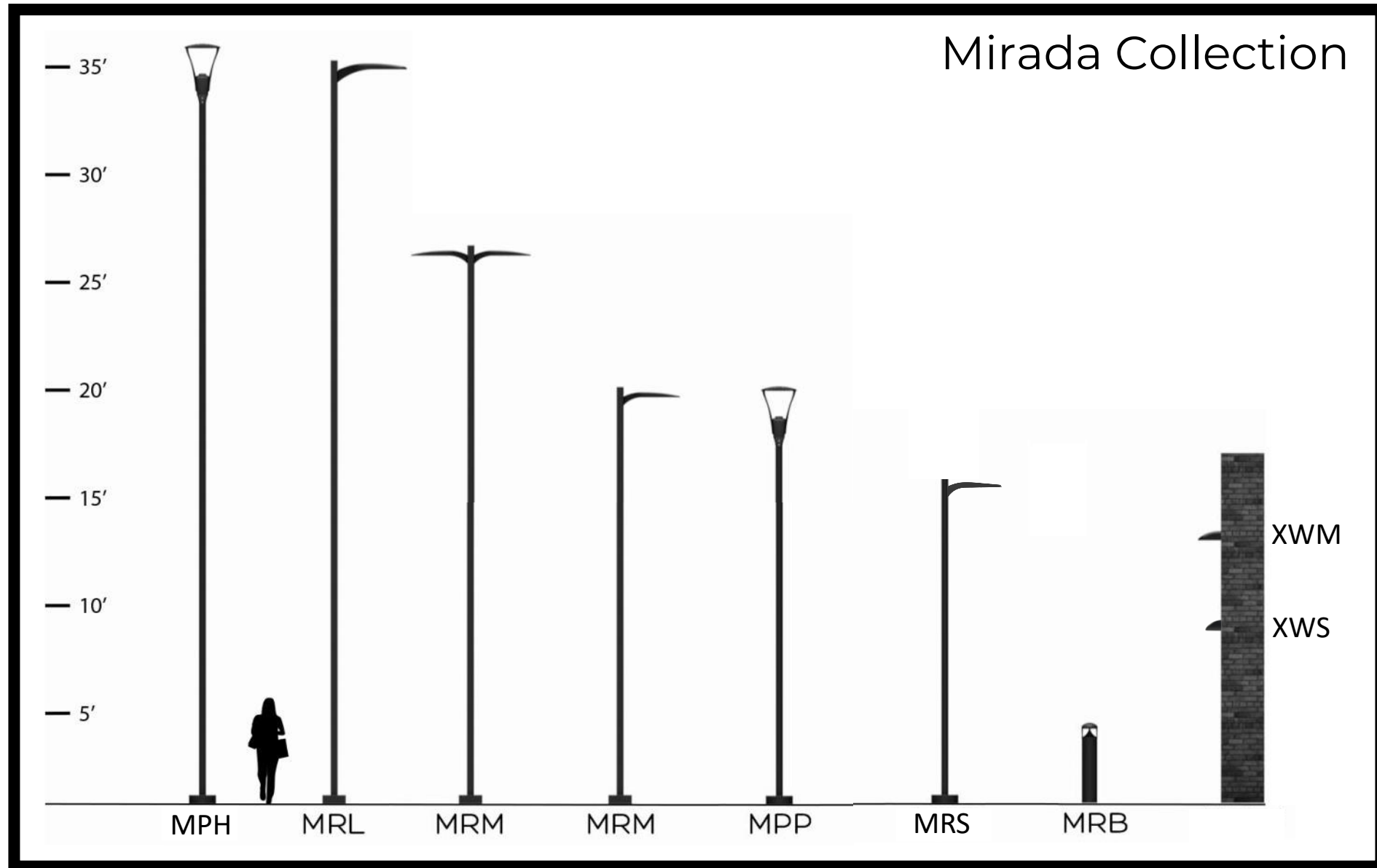
## Mirada Post Top



## Bollard



# Family of Luminaires





**LSI WEST  
COAST  
SUMMIT  
2023**

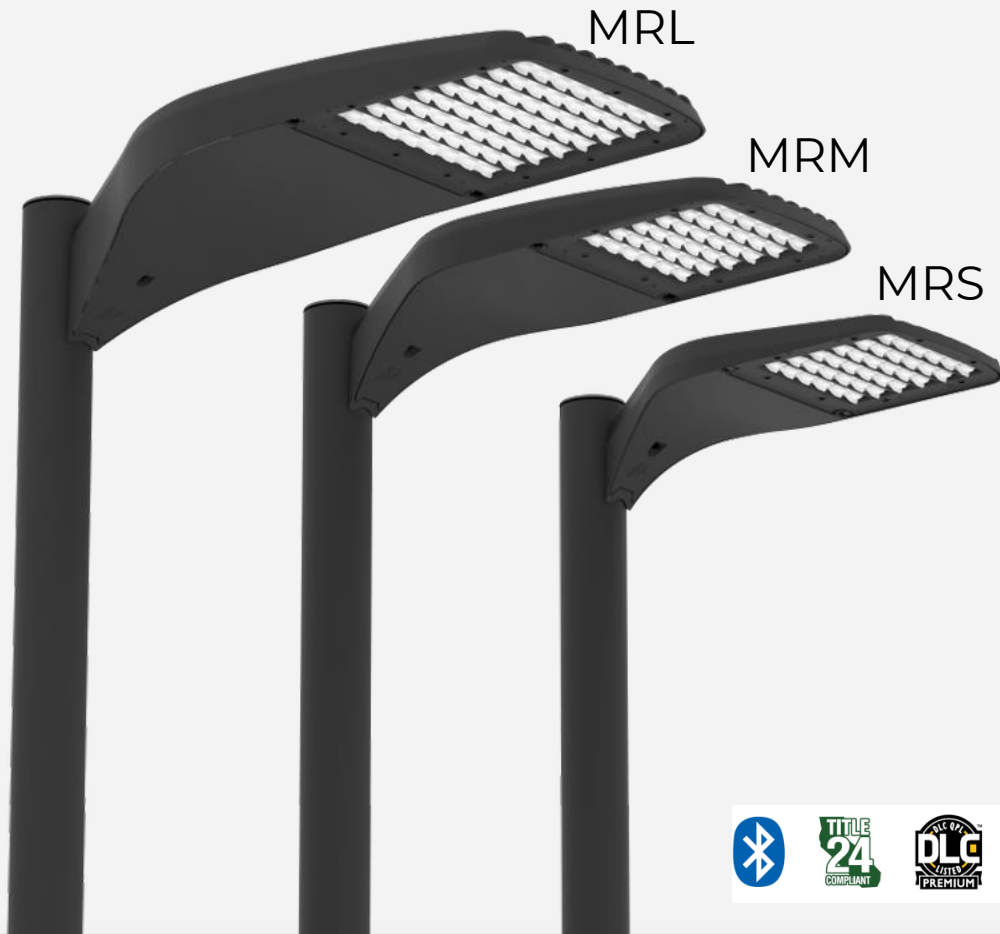
# Mirada

Area Lights





# Mirada Area Lights - Overview



- Sleek, Organic Flowing Shape with Durable Construction
- Programmable Drivers w/Custom Lumen Outputs
- 6 Distributions (Type 2, 3, FT, 5W, FTA & AM)
- 3G Rated for ANSI C136.31 High Vibration Applications
- Optional Wireless Controls, Sensors and 7-Pin Receptacle
- Multiple Mounting Options Including Universal Pole Mount, Adjustable Slip-Fitter, Wall Bracket & Wood Pole Mount
- Ideal for Wide Variety of Specification Grade Applications Where High Performance & Aesthetics are Critical



**Typical Applications:** Schools, Office Buildings, Parking Lots, Strip Malls, Automotive Dealerships, Petroleum Stations, etc.



# The Anatomy of High-Performance Lighting

## Installation

- Universal Brackets for Retrofit Projects
- Quick-Mount for True One-Person Install
- Terminal Block for Faster Connections
- Electrical Access From Below

## Thermals & LED Matrix

- Thermally Optimized Heatsink
- Robust Diecast Construction
- High Efficacy LEDs
- Metal-Core Circuit Board

## Controls

- Integral to Luminaires
- Standalone or Mesh Network
- Simple to use Software and Apps
- Pre-Commissioned Solutions Available

## Optics & Ingress Protection

- Optics will not yellow overtime
- Will not crack or break
- Increase leak resistance
- Does not affect spectral radiosity of LEDs
- 5VA flame-retardant
- Low system complexity with optic/gasket and die cast lens frame





# Mirada Area Lights - Mounting



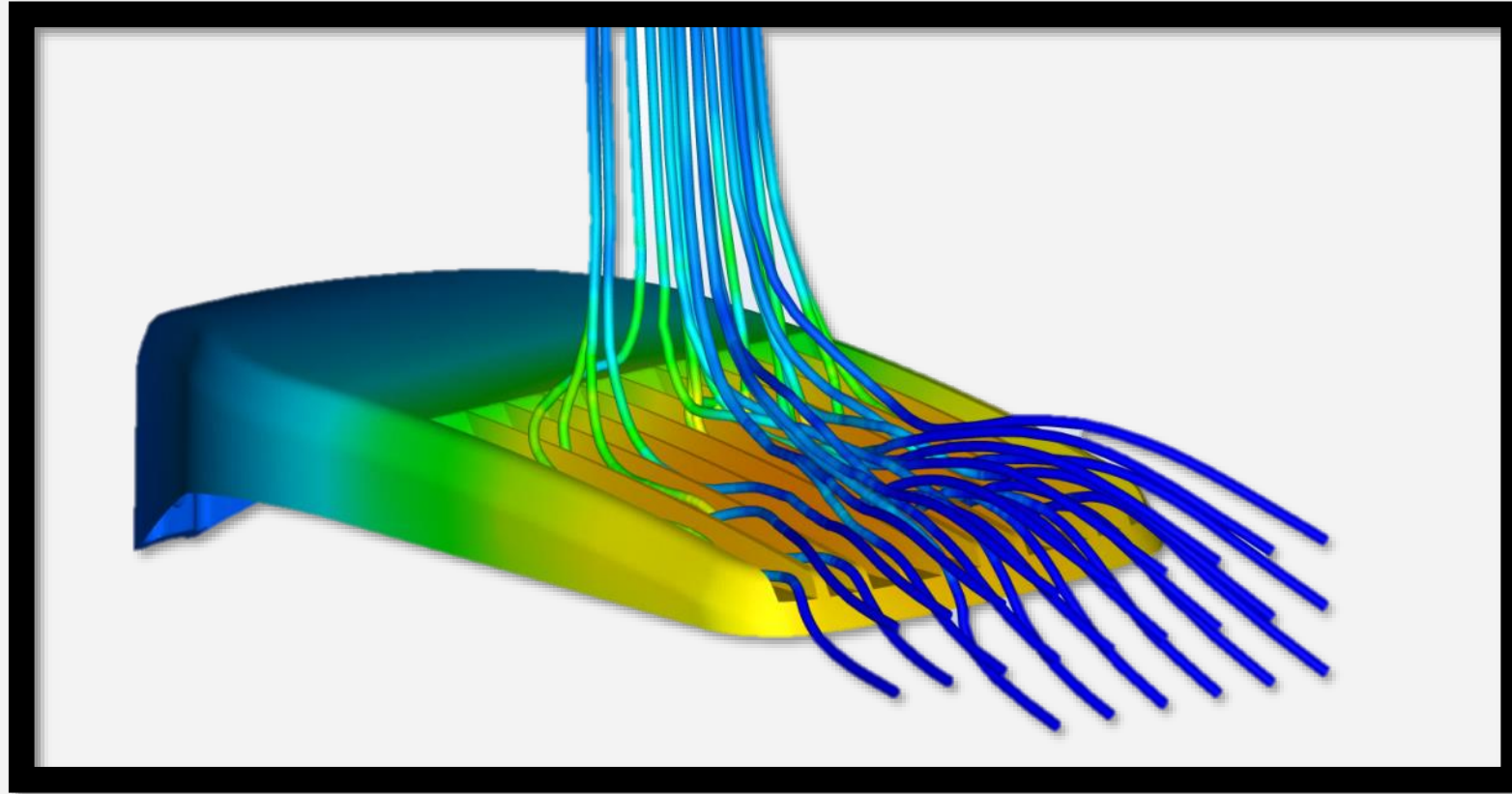
Bolt On/Side Of Pole	Tennon & Slip Fitter	Wall Mount/Wood Pole
 <p><b>Standard Mounting</b> B3 Drill Pattern Mounts to Square &amp; 3-5" OD Round Poles</p>	 <p><b>Adjustable Slip Fitter</b> Tilt in 5° Increments (45° Max Above Horz.) Mounts to 2 3/8" Vert. &amp; Horz. Tenons</p>	 <p><b>Wall Mount Bracket</b> B3/B5 Drill Pattern Mounts to Vertical Surface</p>
 <p><b>Universal Mounting</b> 3.5" – 5" In Line Drill Pattern Mounts to Square &amp; 3-5" OD Round Poles</p>	 <p><b>Tennon Top Fitter</b> B3 Drill Pattern Mounts to 2 3/8" Vertical Tenons</p>	 <p><b>Wood Pole Bracket</b> B3/B5 Drill Pattern Mounts to Wood Pole (6" Min. OD)</p>
 <p><b>Horz. &amp; 15° Quick Mount</b> 2.4" – 4.6" OC Drill Pattern Mounts to Square or 3-5" OD Round Poles</p>	 <p><b>Internal Slip Fitter</b> B3 Drill Pattern Mounts Inside 4" &amp; 5" Square Poles</p>	

Note: MRL can mount to B3 or B5 drill patterns



# Mirada Area Lights - Thermal Flow

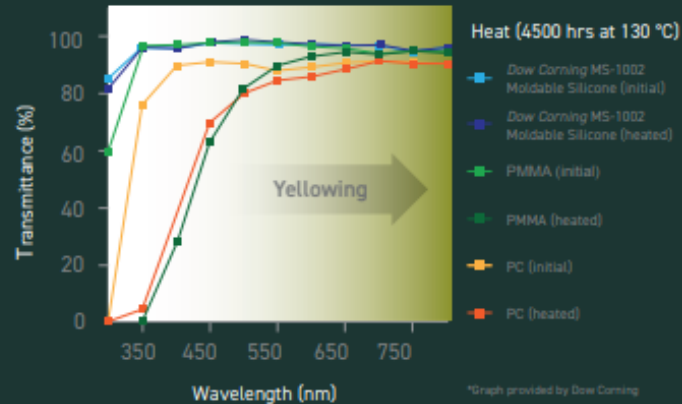
Thermally Optimized Heatsink



# Mirada Area Lights - Silicone Optics

## SEE THE STATS

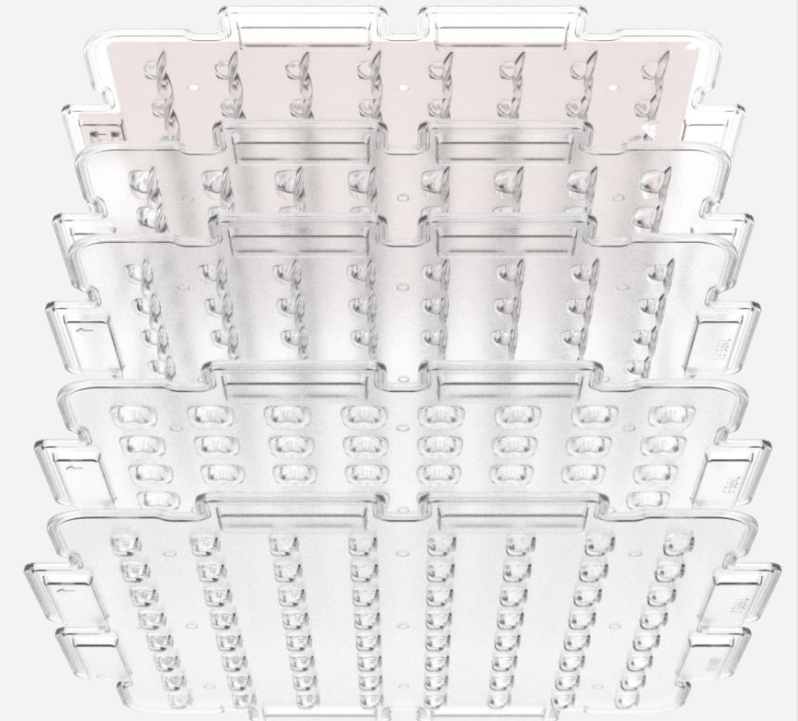
Moldable optical silicones offer transmission rates as high as or higher than competitive materials in both UV and visible spectrums. In addition, moldable optical silicones don't yellow over time at high temperature/high lumen density.



Features	Silicone	Acrylic	Polycarb
High Max Operating Temp	150°C	80°C	90°C
High Light Transmittance	~93%	~92%	~90%
UV Resistance (Yellows)	Superior	Good	Acceptable
Moisture Resistance	Superior	Good	Good

Thermal Aging 200 hrs @ 4mm thickness	130°C	150°C	180°C	200°C
Silicone				
Acrylic and Polycarb				





# Standard Distributions

5 Standard Optics

- 2** – IES Type II (Roadway Distribution)
- 3** – IES Type III (Area/Roadway Distribution)
- FT** – IES Type IV (Hybrid 3 / 4 Distribution)
- 4** – IES Type IV (Maximum Forward Throw)
- 5W** – IES Type V (360° Wide Distribution)



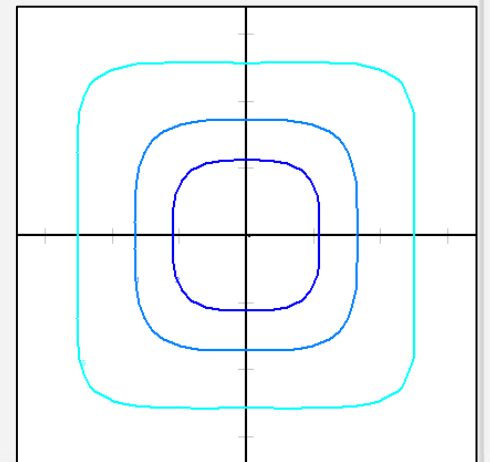
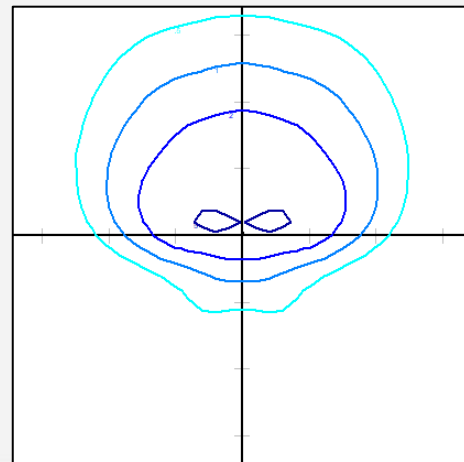
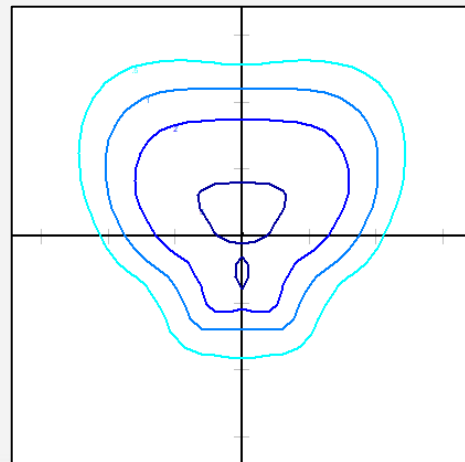
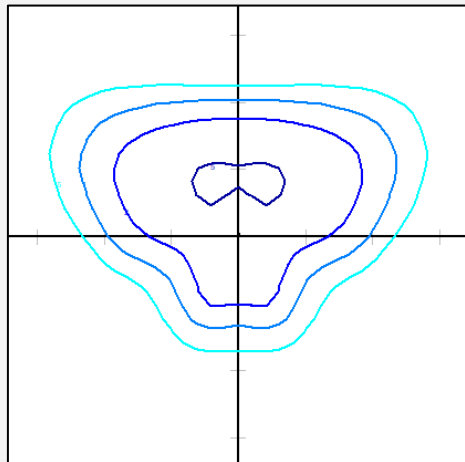
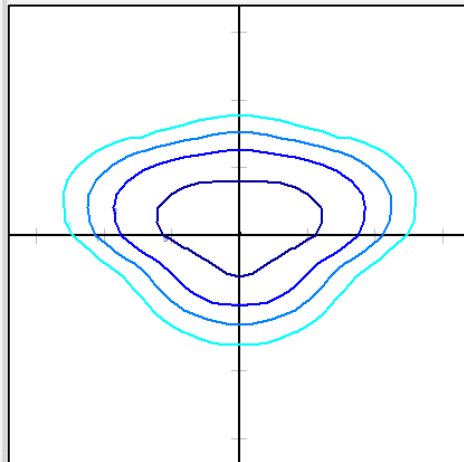
**Type 2**

**Type 3**

**Type FT**

**Type 4**

**Type 5W**



25' Mounting Height / 25' Grid Spacing

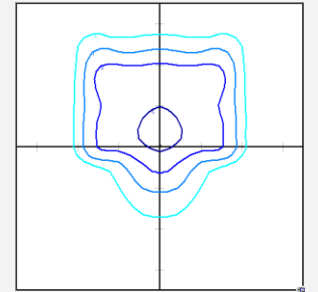
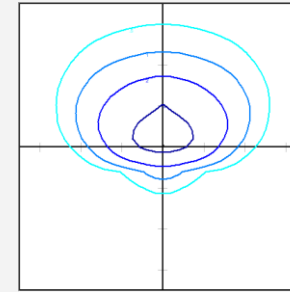
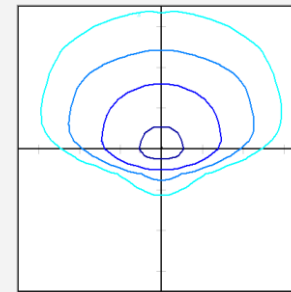
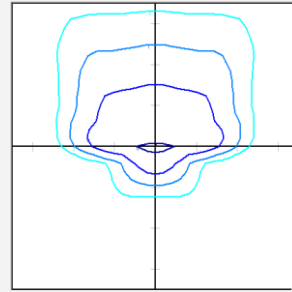
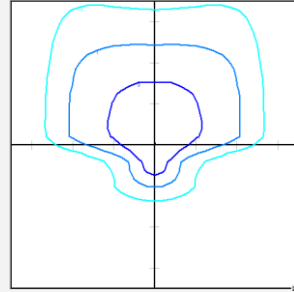
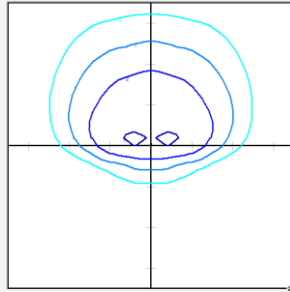




# Performance Comparison – T4 Area Light Distribution



Type 4 Distribution  
~24,000 Lumens  
4000K CCT  
25' Mounting Height



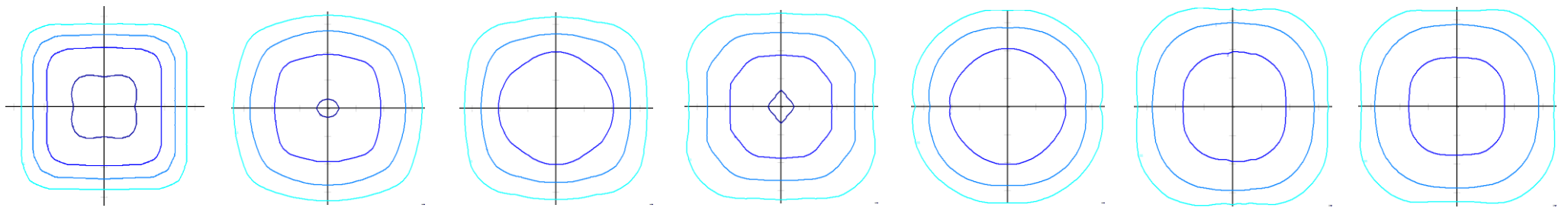
Total Lumens	23,934	22,695	23,043	23,840	23,753	24,048
% Backlight	17%	19%	21%	20%	18%	21%
Street Lumens	19,865	18,358	18,139	19,028	19,382	18,987
Watts	158	184	184	169	131	177
Efficacy	151	123	125	141	181	136
Backlight Rating	B3	B3	B3	B3	B3	B3

*The new type 4 puts more light on target!*

# Type 5 Distribution Comparison



	MRL-50L-40-5W	GLNA-AF-07-5WQ	PRV-XL-C150-D-T5	DSX2-P7-40K-T5W	RSX4-P3-40K-R5	P34-128L-900-5W	ECL-96L-1.2A-5W
Lumens	52,018	50,072	52,349	50,723	51,656	48,790	44,406
Watts	375	445	346	448	369	415	365
LPW	139	113	151	118	140	118	122
BUG Rating	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5





# Specialty Distributions

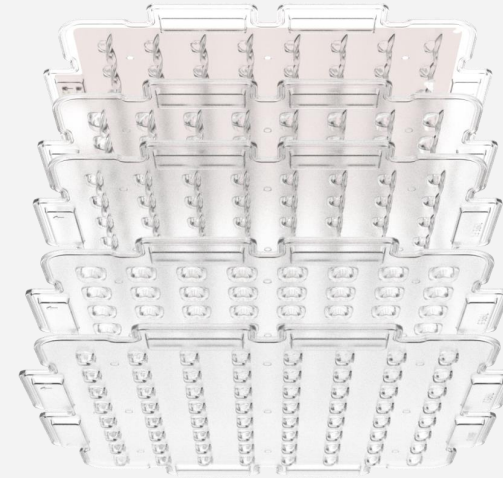
4 Specialty Optical Distributions

**FTA** – Forward Throw Automotive

**AM** – Automotive Merchandise

**RC** – Right Corner

**LC** – Left Corner



*Automotive*

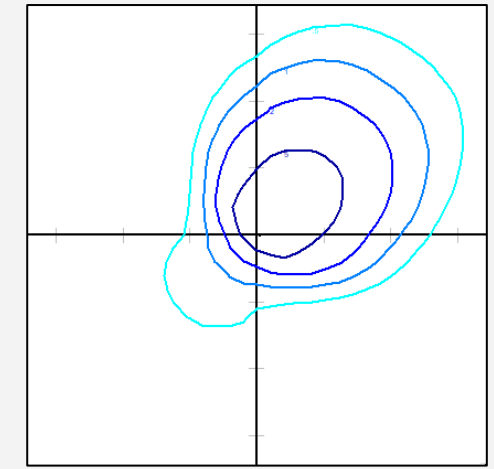
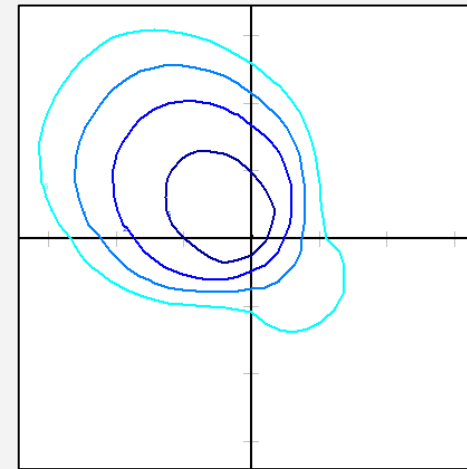
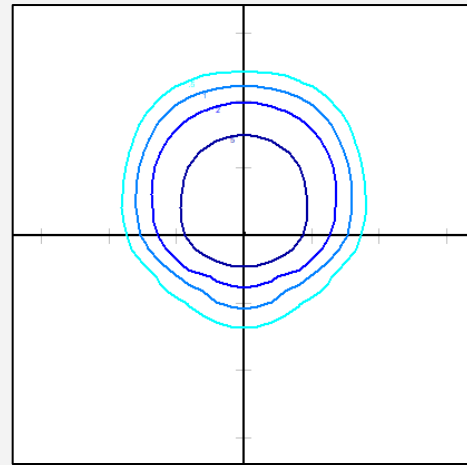
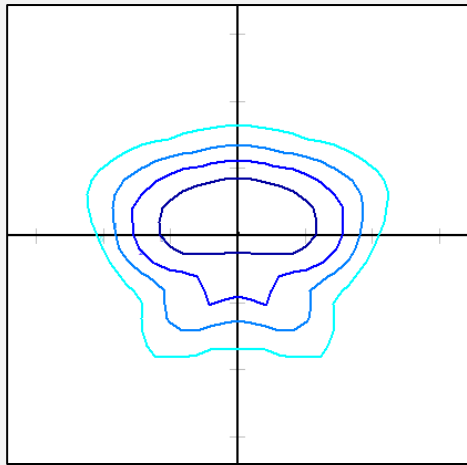
*Corner*

**FTA**

**AM**

**LC**

**RC**



25' Mounting Height / 25' Grid Spacing





# Automotive Distributions

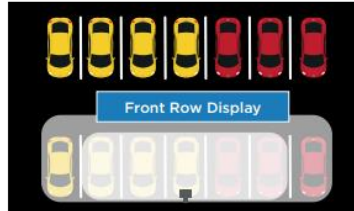
## Outdoor Auto Optic Flyer



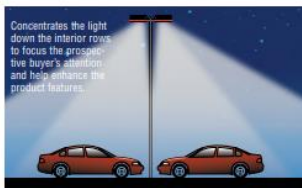
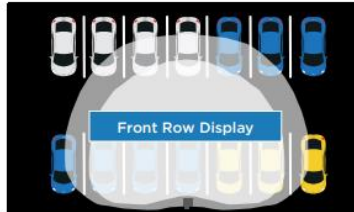
Unlike Any Other, LSI Automotive Lighting Offers a Complete Selection of Outdoor Automotive Optics

Known as an industry leader providing the best outdoor lighting solutions, LSI Automotive Lighting is raising the bar once again with two dedicated optics for automotive outdoor retail applications.

### Automotive Front Row Optic (FTA)



### Automotive Merchandise Optic (AM)

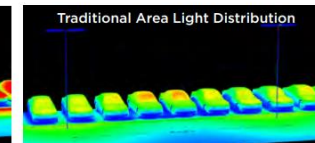
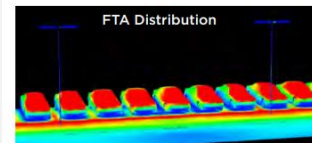
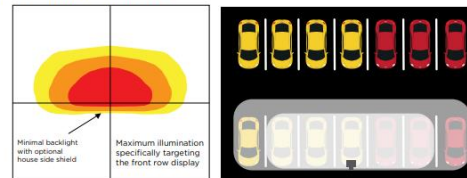


## Automotive Application Guide



## Front Row Optical Selection

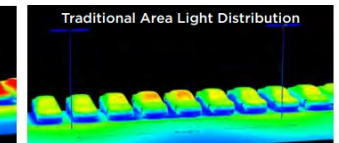
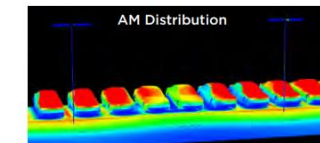
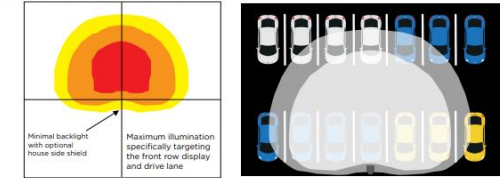
### Automotive Front Row Optic (FTA)



### RECOMMENDED ILLUMINANCES FOR AUTOMOTIVE

Front Row	Sales	Customer/Employee Parking	Storage Areas
30-40 FC	20-30 FC	5-10 FC	3-5 FC

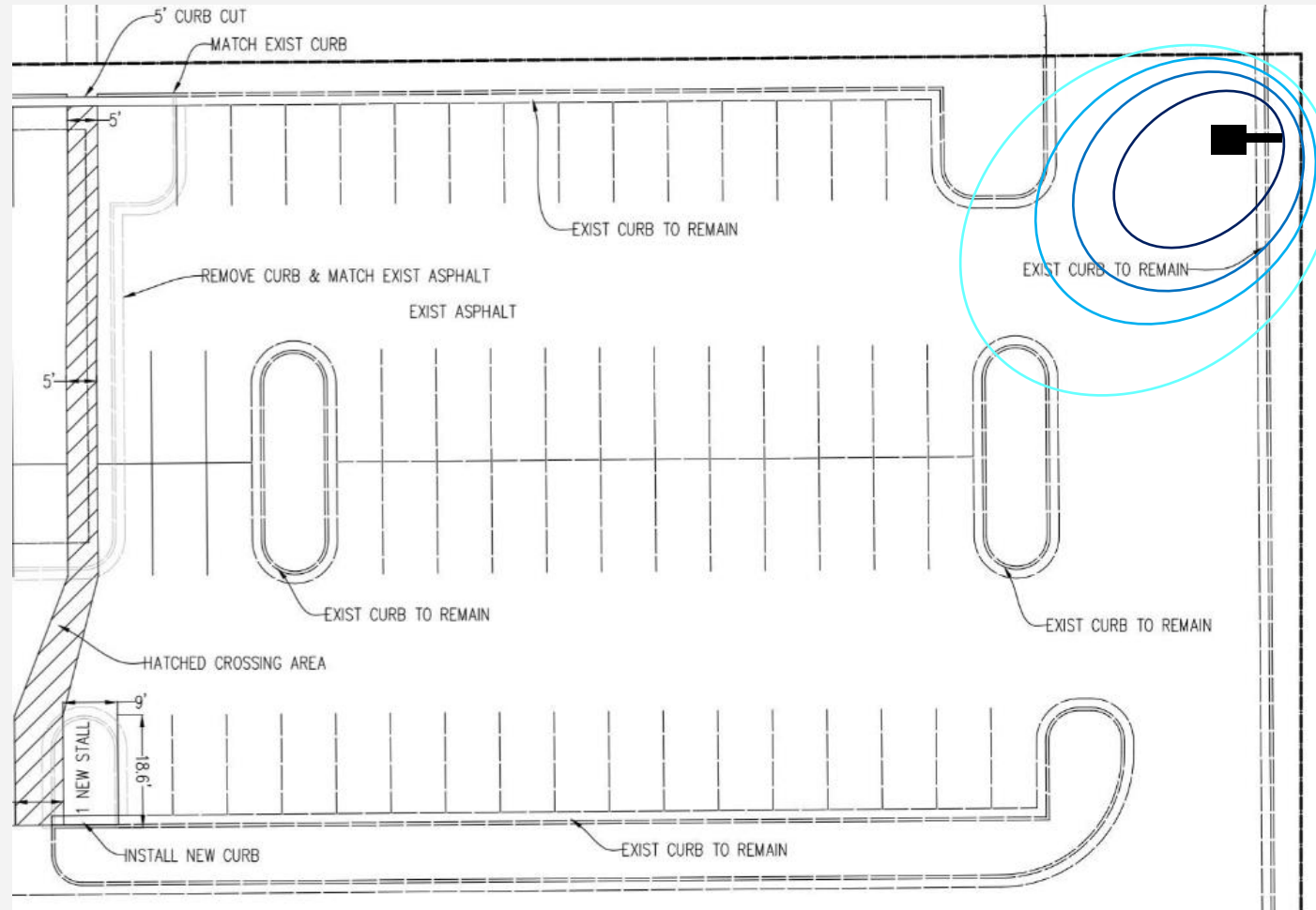
### Automotive Merchandise Optic (AM)





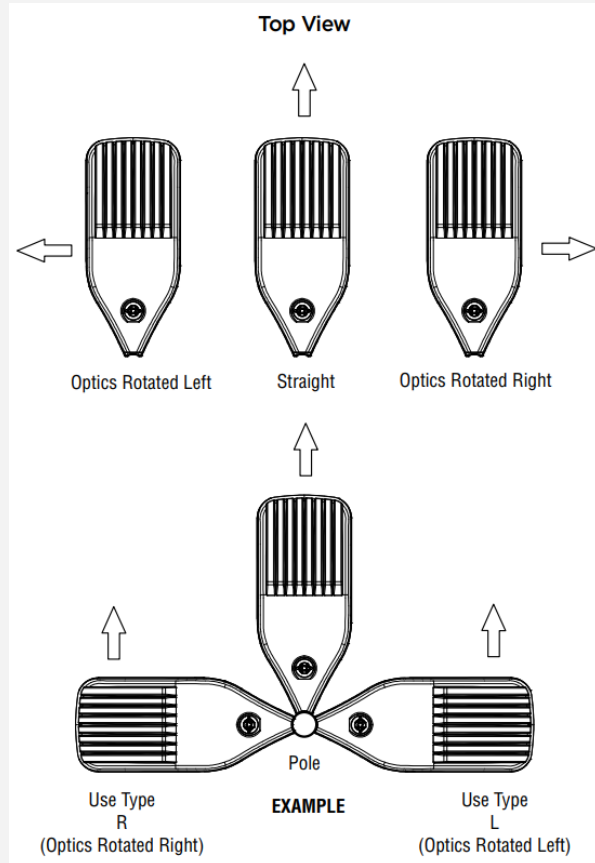


# Corner Distributions



# Rotatable Optics

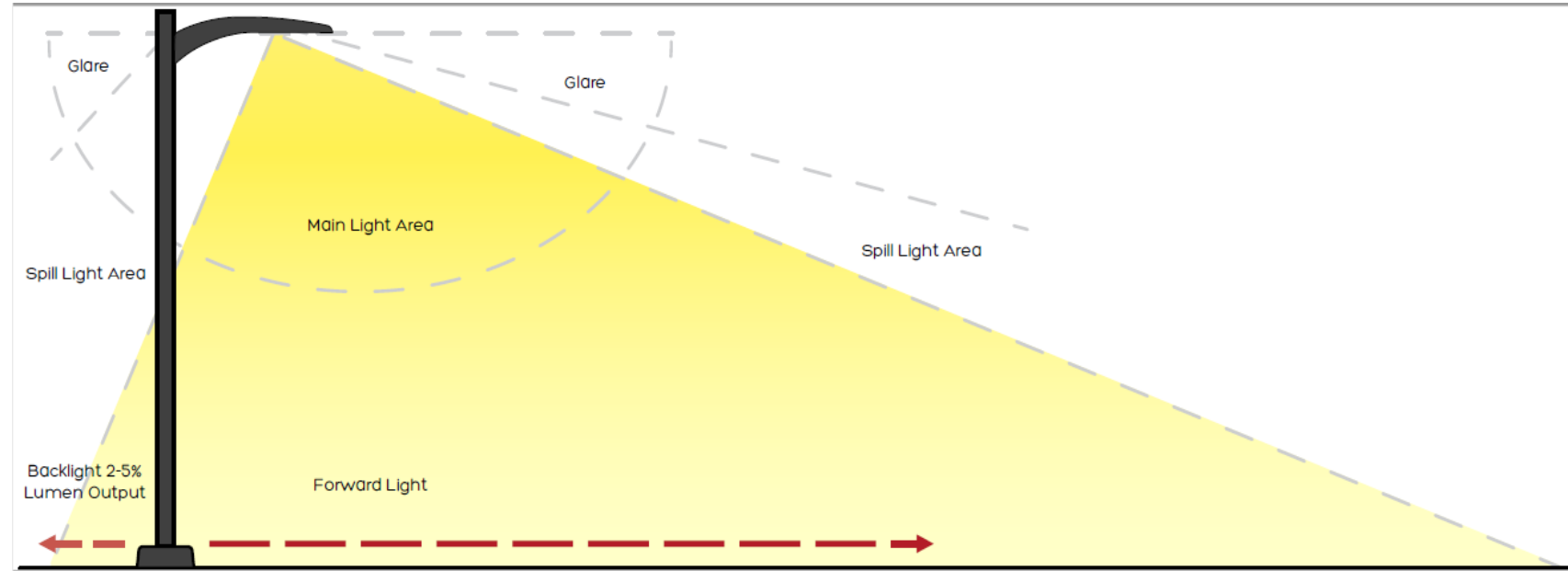
## Factory Rotatable Optics



# Integral Louver (IL) & Half Louver Shield (IH)



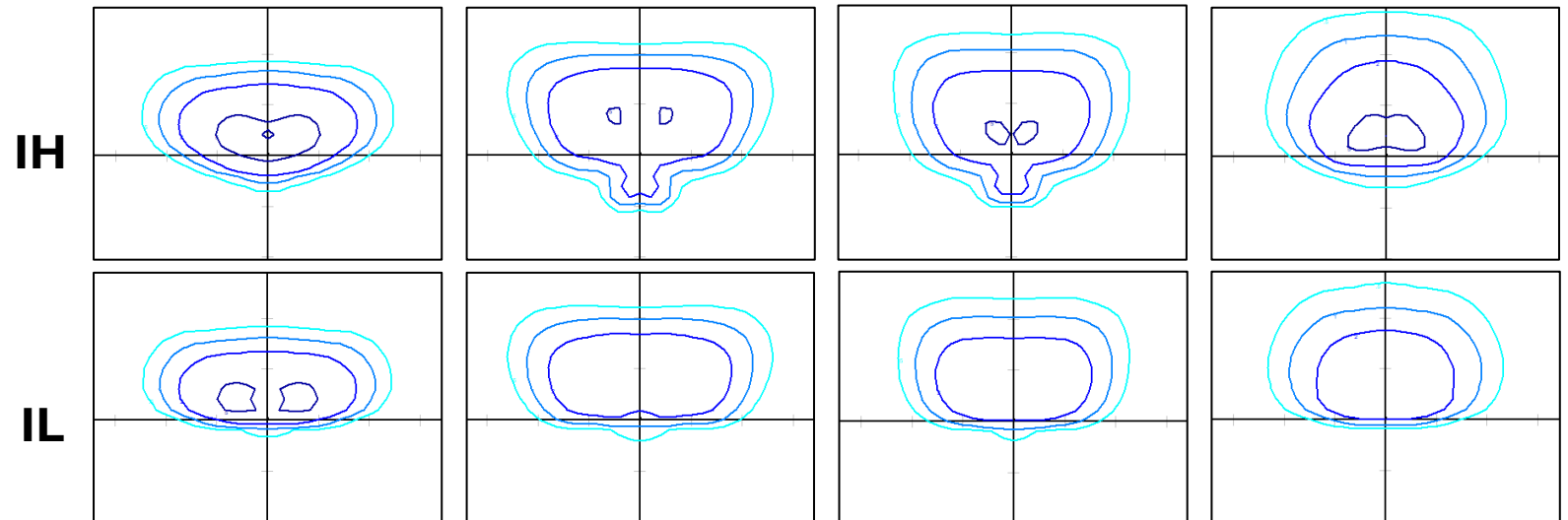
Rotates with the optical Assembly



Integral Half Louver Shield  
*9-15% Backlight*



Integral Full Louver Shield  
*2-5% Backlight*



# Controls

## Wireless Controls



## 7-Pin Receptacle



ANSI C136.41-2013 for  
Twist Lock Photocontrols &  
Wireless Control Modules

## Standalone Bluetooth Sensor



## Button Style Photocell



120V, 208-277V & 347V





**LSI WEST  
COAST  
SUMMIT  
2023**

# Mirada

Post Top





# Mirada Post Top (MPP/MPH) Overview



3000K

4000K

5000K

- 20" Housing Ideal for Mounting Heights of 15 - 40'
- 10 Standard Lumen Packages (10,000 - 72,000 Lumens)
- 6 Distributions (Type 2, 3, FT, 5W, FTA & AM)
- Up to **150 Lumens Per Watt**
- 3000K, 4000K & 5000K CCT Standard (70 CRI)
- Mounts to 2 3/8" – 3" Tenon Top

Lumen Pkg.	10K lm	15K lm	20K lm	25K lm	
<b>Wattage</b>	73	117	166	208	
<b>LPW</b>	149	147	139	136	
Lumen Pkg.	35K lm	45K lm	55K lm	65K lm	72K lm
<b>Wattage</b>	294	406	488	589	649
<b>LPW</b>	135	126	122	115	110



# Applications

Ideal solution for applications such as:

## **MPH**

- Retail Centers
- Large Parking Areas
- Automotive Dealerships
- Distribution centers

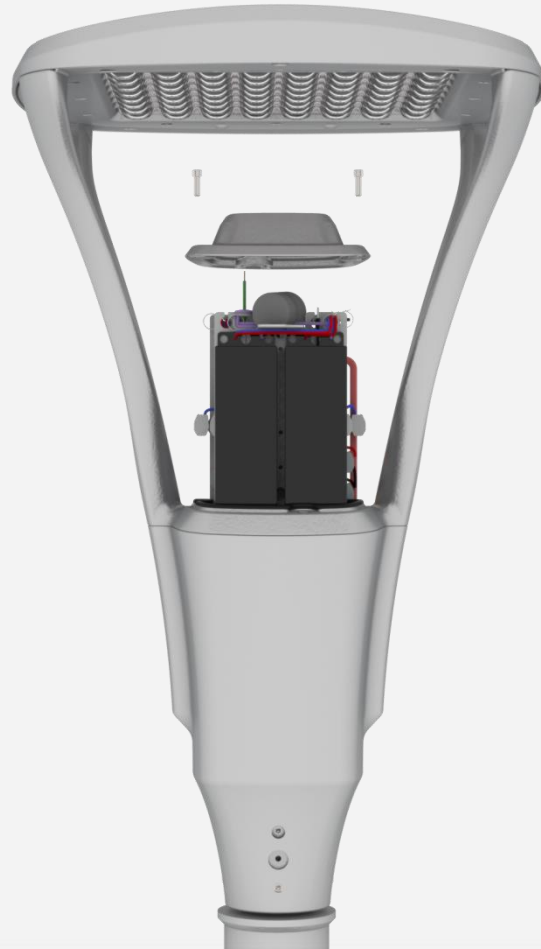
## **MPP**

- Cities & Parks (municipalities)
- Parking lots
- Universities & Schools
- Retail Centers & Office Buildings



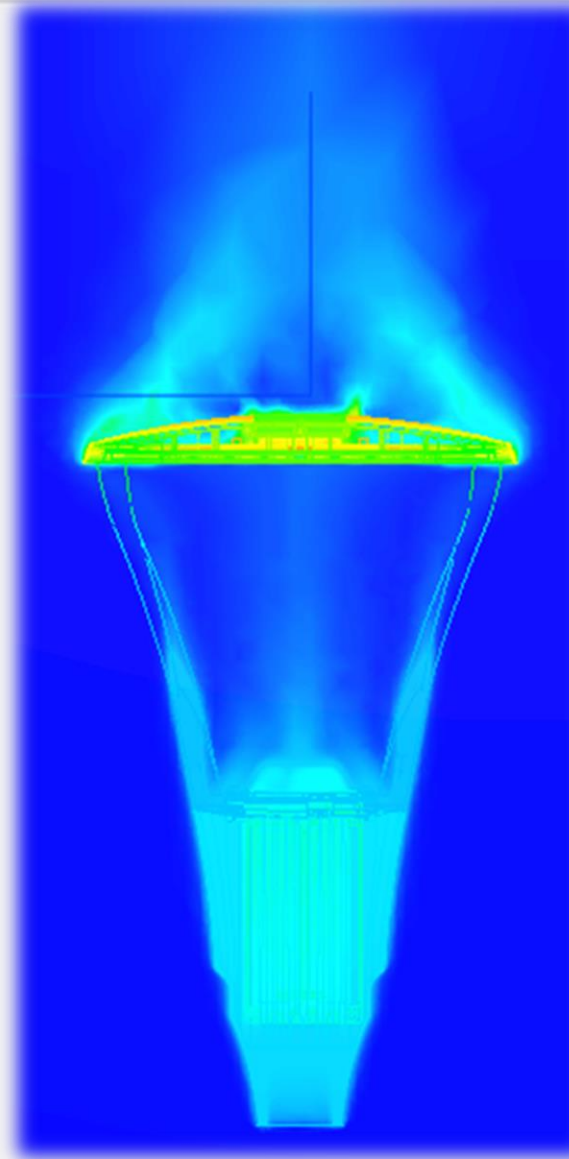


# Accessibility



# Thermal Flow

## Thermally Optimized Heatsink



L92 -100,000 HRS @ 40°C





# Pole Adapters



## **Square Internal Tenon Adaptors**

The Square Pole Tenon 4", 5", & 6" Adaptors allow for the Mirada Post Top to be mounted on a square open top steel pole. Tenon adaptors slide into pole and bolt through for securing the tenon to the pole. These tenons are made hearty steel tubing, are double-welding and are painted with LSI- Duragrip Paint.



## **Round External Tenon Adaptors**

The Round Pole Top Tenon adaptors provide the right size tenon to ensure proper mounting of the Mirada Post Top onto Round tapered or straight poles with 3 size variations. These tenons are made from hearty steel tubing, are double-welding, and are painted with LSI-Duragrip Paint.



**LSI WEST  
COAST  
SUMMIT  
2023**

# Mirada

Wall Sconces





# Mirada Medium Wall Sconce (XWM) Overview



- Sleek Design for Architectural Applications
- Durable Construction
- 3 Distributions with Exceptional Performance
- 8 Lumen Packages Standard
- 3,000 - 21,000 lumens @ up to 150 LPW
- Programmable Drivers
- Optional Battery Backup
- Standalone & Wireless Controls

AMBER	Lumen Pkg.	3L lm	4K lm	6K lm	8K lm	12K lm	15K lm	18K lm	21K lm
3000K	<b>Wattage</b>	23	30	47	64	82	105	130	161
4000K	<b>LPW</b>	148	150	144	137	150	145	139	131
5000K									



# XWM Distributions

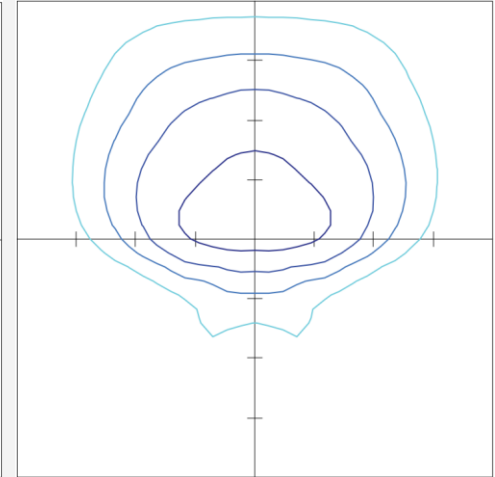
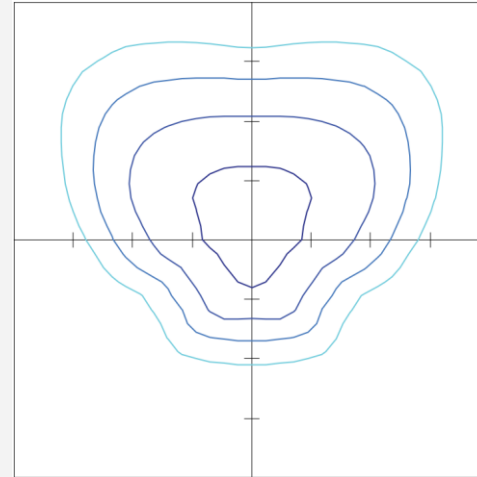
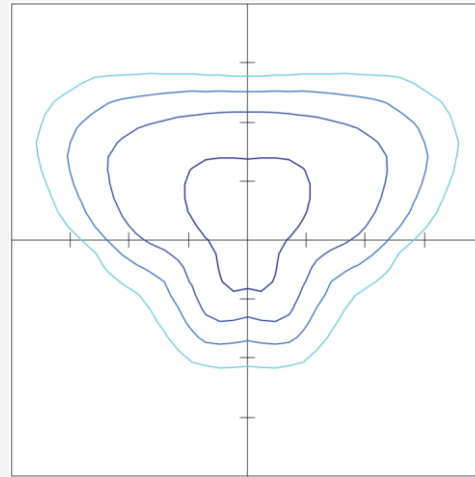
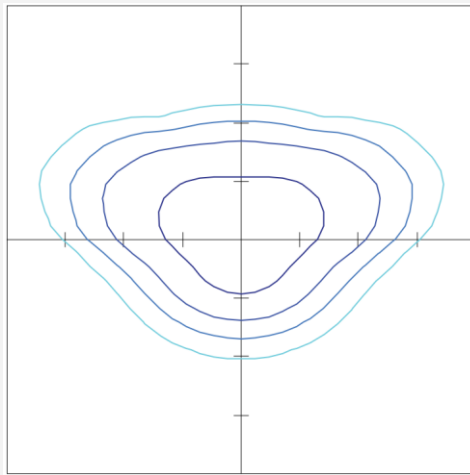
Type 2

Type 3

Type FT

Type 4

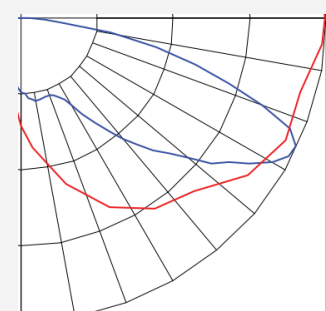
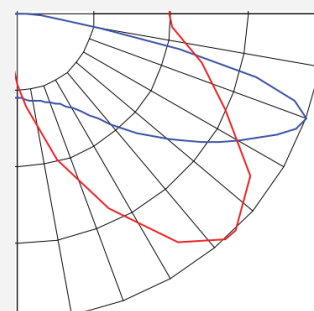
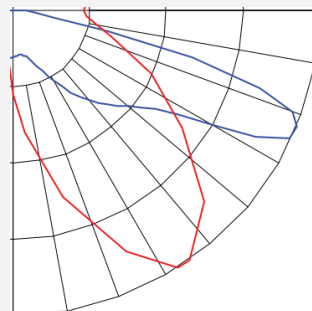
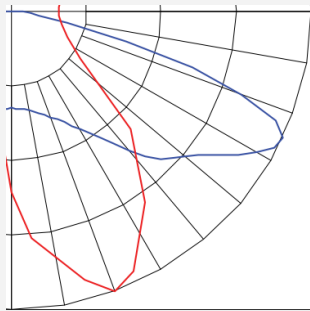
Isocurves



15' Mounting Height / 15' Grid Spacing

5 FC 2 FC 1 FC 0.5 FC

Polar Plots



Vertical Plane Horizontal Cone



# Controls & Options

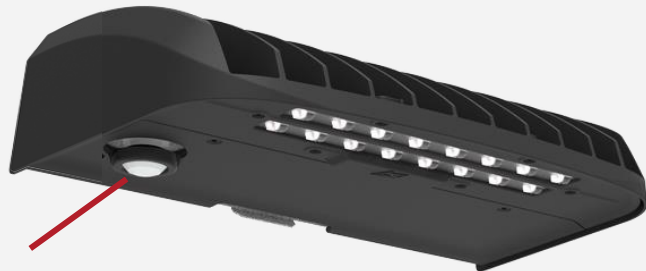
## Wireless Controls



AirLink™ Blue

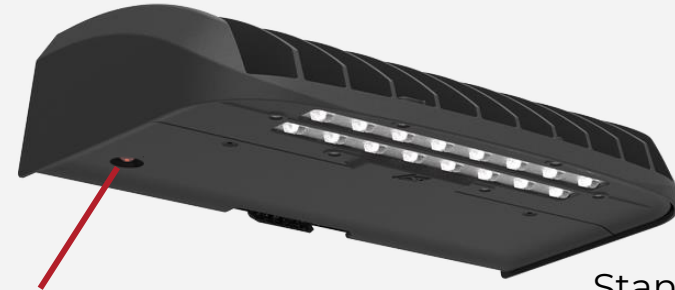


## Standalone Bluetooth Sensor



IMSBT

## Integral Battery Backup



LED  
Indicator &  
Test Switch

Standard (0°C) and  
Cold Weather (-  
20°C) Options  
Available

## Button Style Photocell



120V, 208-277V & 347V



# Mirada Small Wall Sconce (XWS) Overview

**Silicone**



**Acrylic/Polycarb**



- Clean Design for Architectural Applications
- Smaller Size for Above Doorway and Lower Mounting Height Applications
- 3 Lens Material Options (Silicone, Acrylic, Polycarb.)
- 2,000 - 8,000 lumens @ up to 162 LPW
- 5 Color Temperatures @ 70 & 80 CRI
- Programmable Drivers w/Custom Lumen Outputs
- Optional Battery Backup, Dual Driver & 10kV Surge
- Standalone & Wireless Controls Available

**2700K 3000K 3500K 4000K 5000K**

Lumen Pkg.	2L lm	3K lm	5K lm	6K lm	8K lm
<b>Wattage</b>	13	19	35	43	61
<b>LPW</b>	158	162	148	145	138

*Above results from 5000K with type 3 distribution (XWS SIL 3 50 70CRI)*





# XWS – Flexibility in Application

## Visual Comfort



### Ideal for:

- Above Doorways & Walkways
- High Pedestrian Traffic Areas
- Low Glare/Low Brightness

## Photometric Performance



### Ideal for:

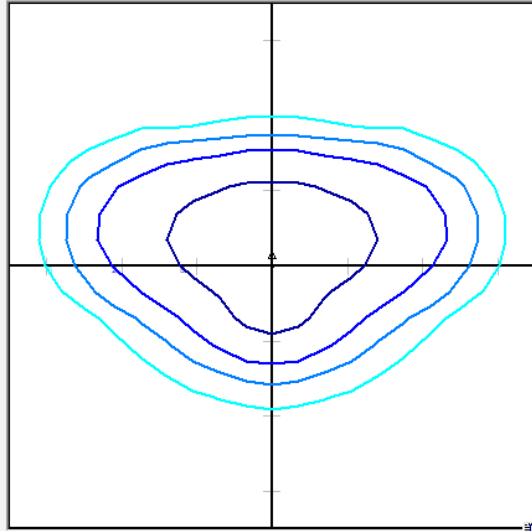
- Lighting Building Perimeters
- Light Drive Lanes Around Buildings
- Eliminating Pole Locations in Parking Lot

# XWS SIL - Distributions

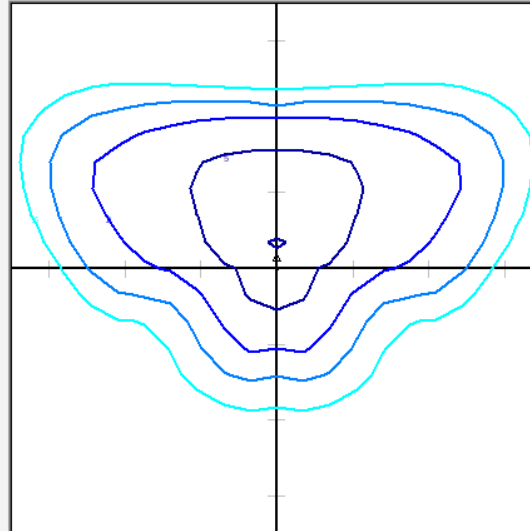


**Isocurves**

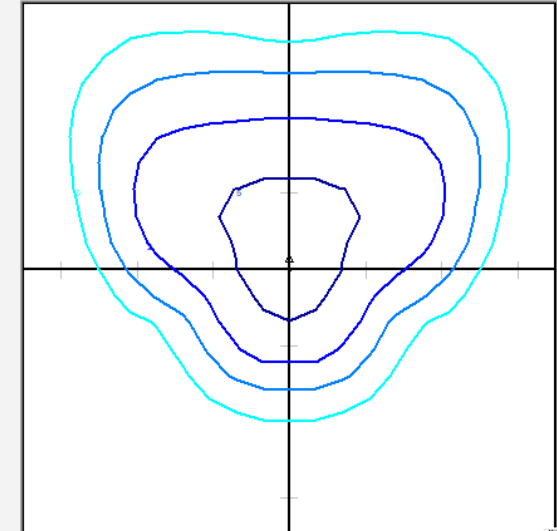
**Type 2**



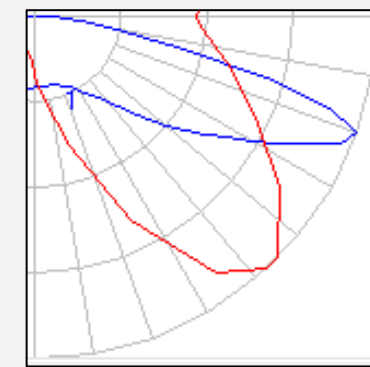
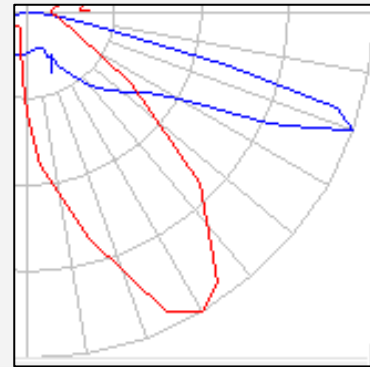
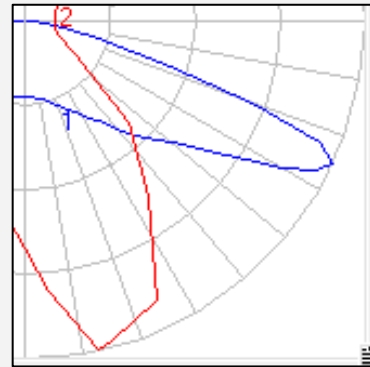
**Type 3**



**Type FT**



**Polar Plots**



# XWS VC - Distributions



**Forward Throw Wide (FTW)**

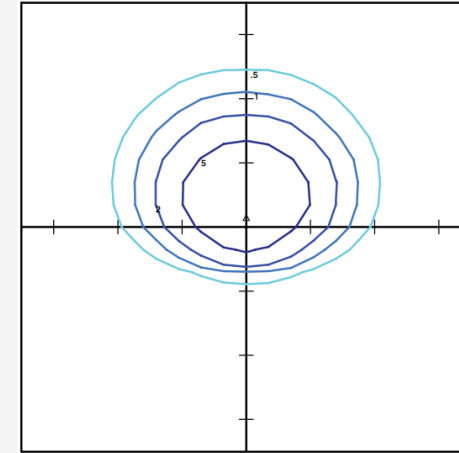
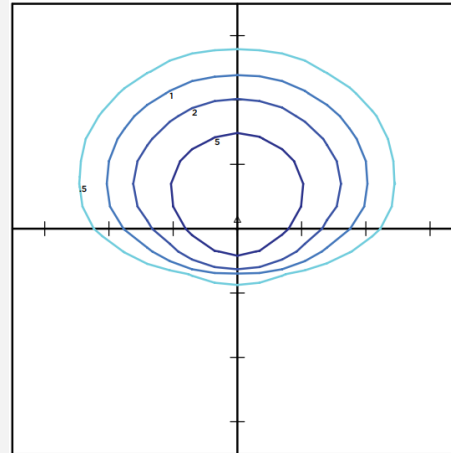
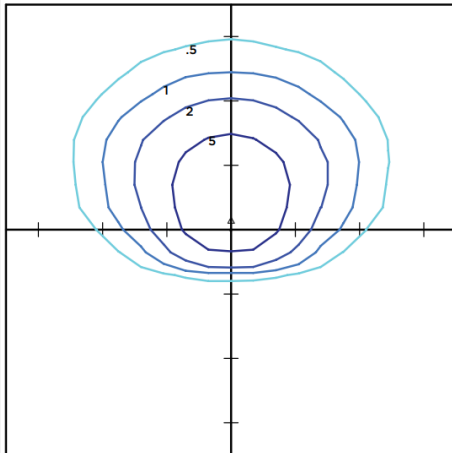


**Medium Throw (MT)**

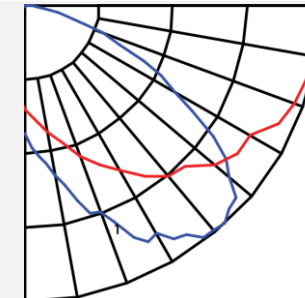
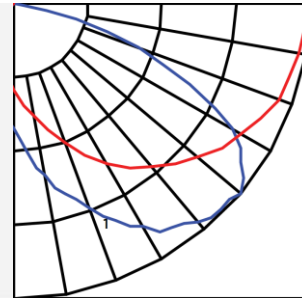
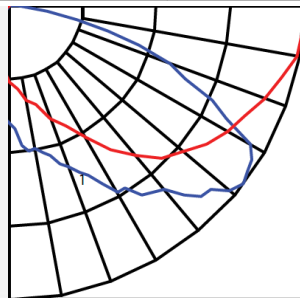


**Medium Throw Diffused (MTD)**

**Isocurves**



**Polar Plots**

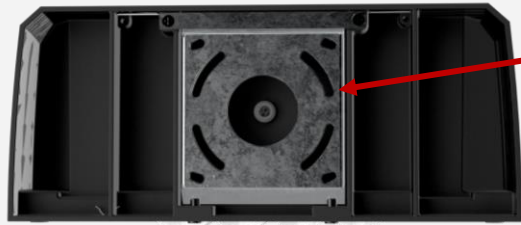




# Mounting

## J-Box Wall Mount

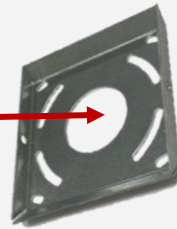
Quick Mount Plate



Mounting provisions for junction box or direct wall mount

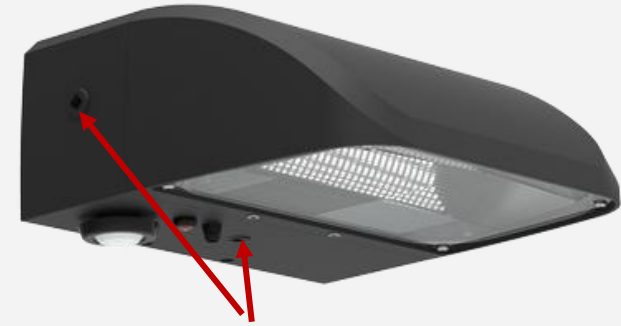


Secured with two flush mount screws



Luminaire hangs from quick mount plate

## Conduit & Rough Surfaces



1/2" threaded hubs for surface conduit & field installation of button photocell



Wall Spacer Plate allows the luminaire to float off the wall and provides space for securing wires



# Options & Accessories

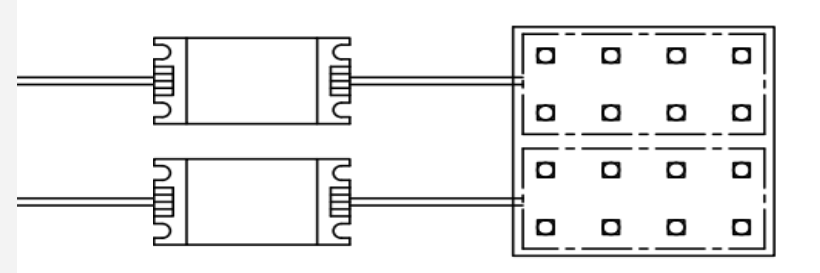
## Integral Battery Backup



LED Indicator & Test Switch

Standard (0°C) and Cold Weather (-20°C) Options Available

## Dual Sources

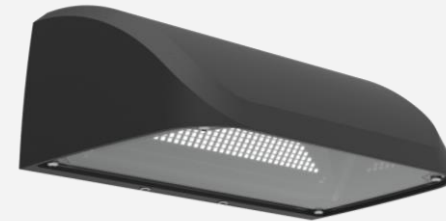


Dual Driver, Circuit & Power Feeds

## High Abuse Environment Ready



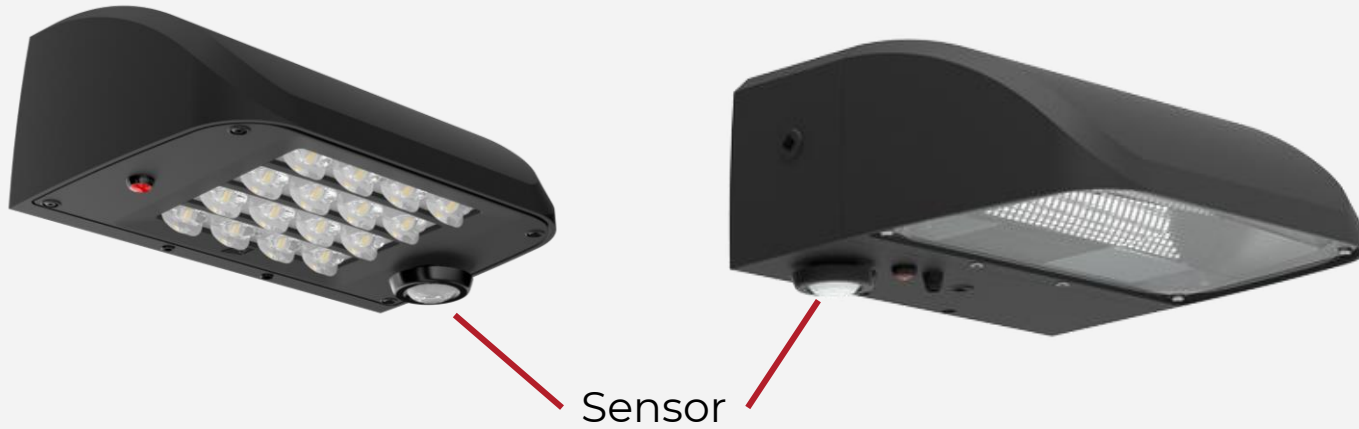
IK08 rated impact protection with Silicone Optic Versions



IK10 rated impact protection with Polycarbonate Lens Versions

# Controls

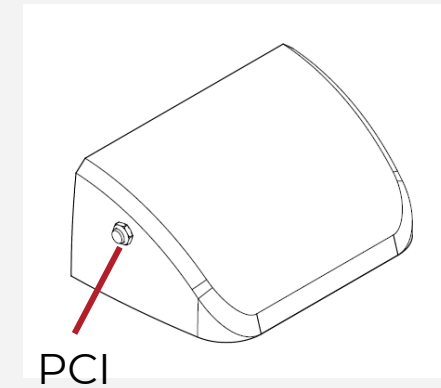
## Standalone Bluetooth Sensor & Wireless Controls



AirLink™ Blue

IMSBT

## Button Style Photocell



120V, 208-277V & 347V

# Competitive Comparison – Performance Wall Sconces



		No Visible Heat Fins	Silicone Optics	Main Housing Covers J-Box	Up to 160 LPW	< 8.5" Depth	IK08 Rated	Integral Battery & Controls
 								
 								
 								
 								
 								
 								
 								



**LSI WEST  
COAST  
SUMMIT  
2023**

**Mirada**

Bollard





# Overview



## **(MRB) Mirada Bollard**

- Modern Urban Aesthetics
- Durable Construction
- 2 Distributions with Exceptional Performance
- 2 Lumen Packages Standard
- Very Efficient / low Wattages
- 5 Standard Color Temperatures
- Programmable Drivers
- Ingress Protected
- Optional GFCI and Battery Backup



# Features and Benefits

Amber

2700K

3000K

4000K

5000K



## (MRB) Mirada Bollard

- IDA Approved with less than 1% Uplight
- IP65 Rated Optical System
- Driver is integrated into the head and does not hang down into the shaft for maximum reliability
- Flat Acrylic hidden lens provides full cutoff
- Customer adjustable height in 6" increments (Between 2-6')
- Optional Roughneck Steel Base for even stronger solution



# Slice

**LSI WEST  
COAST  
SUMMIT  
2023**





# Slice Family

Slice Medium Area  
(SLM)



Slice Large Area (XLCL)



Slice Wall Sconce  
(XLCW)





# Geometric Scences

LSI WEST  
COAST  
SUMMIT  
2023



A photograph of a Chick-fil-A restaurant at dusk. The building is a two-story brick structure with a prominent sign on the left side. The sign features the Chick-fil-A logo, which is a stylized chicken head with a crown, and the text "Chick-fil-A" in a cursive font. Below the logo, the text "THE ORIGINAL CHICKEN SANDWICH" is displayed in a bold, sans-serif font. The building is illuminated with warm, yellow lights, and the sky is a deep blue with scattered clouds. In the foreground, there is an outdoor seating area with tables and chairs, and several red patio umbrellas are visible. The overall atmosphere is warm and inviting.

Chick-fil-A

THE ORIGINAL  
CHICKEN SANDWICH

47



# Geometric Sconce Overview

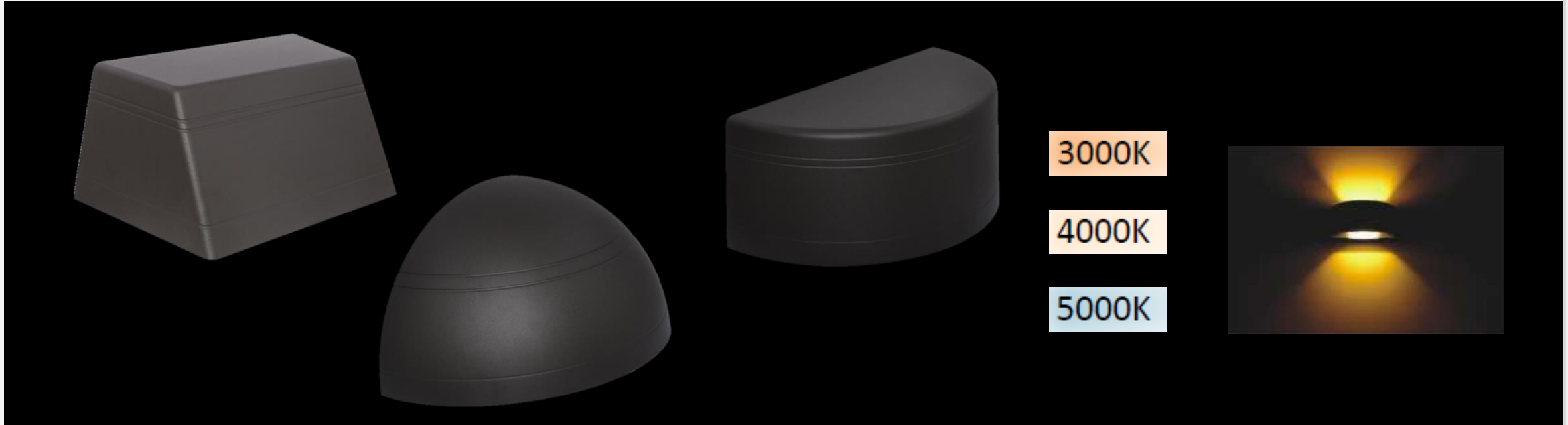


- Classic Trapezoid, Half Round and Quarter Sphere Shapes
- Ideal for New Construction and Retrofit
- Recessed LED Board and Frosted Lens for Visual Comfort
- Half Round Available with Up/Down Distribution
- 4 Standard Lumen Packages (2,000 - 8,000 Lumens)
- 5000K, 4000K and 3000K CCT's (70 CRI)
- Integral Battery Backup and 10KV Surge Device Options
- Optional Wireless Controls, Sensors and Photocell
- Wet Location Wiring Box Accessory for Conduit





# LPW and CCT Review



Down Light Only

Lumen Pkg.	2L Im	3K Im	6K Im	8K Im
Wattage	15	30	50	72
LPW	127	127	128	117

Up/Down

Lumen Pkg.	6K Im
Wattage	40
LPW	151





LSI WEST  
COAST  
SUMMIT  
2023

# Legacy LED & Decorative/Post Top





# Overview

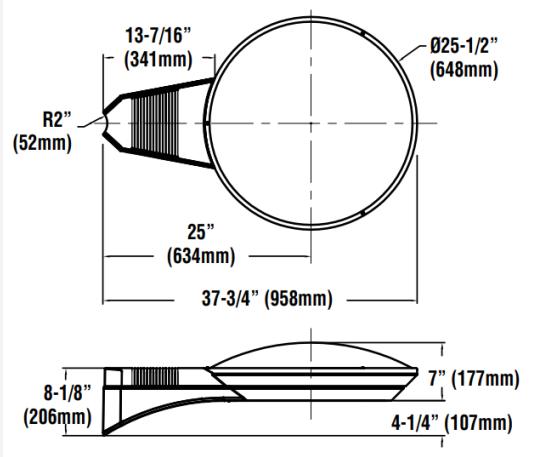
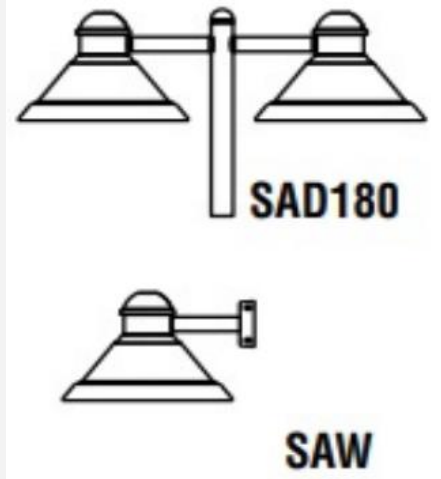
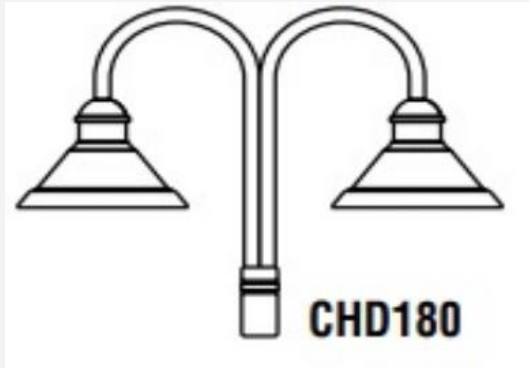


- Silicone Optics
- Type 2, 3, FT and 5W Distributions
- 5,000 – 25,000 Lumens @ up to 165 LPW
- High Voltage (All Outputs)
- 3000K, 4000K, 5000K CCT's
- Optional IMSBT and AirLink Blue Wireless Controls
- Integral Louver Option



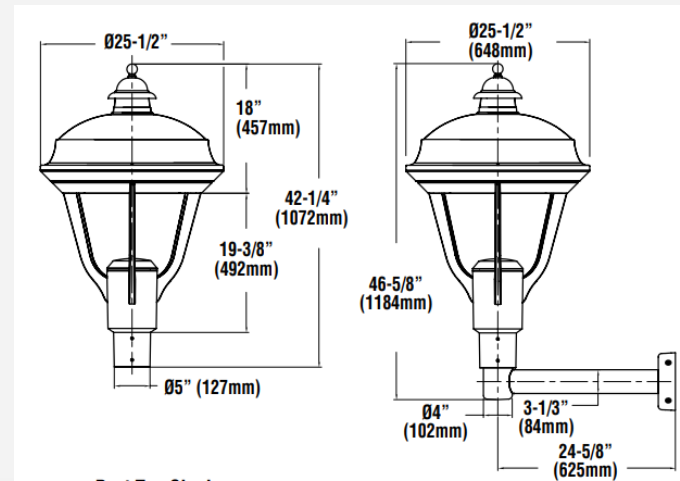
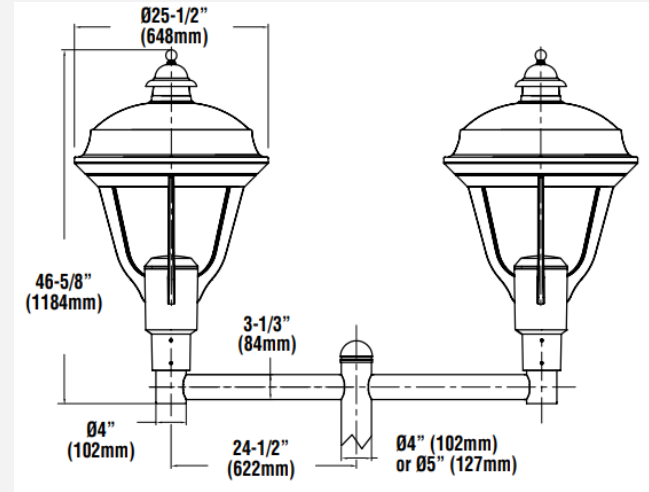
# Mounting

## LifeStyle



## Side Arm

## Post Tops







# Commercial Area, Flood & Wall

LSI WEST  
COAST  
SUMMIT  
2023





# Overview



**SSA**



**SMA**

## Commercial Area/Flood/Wall

- 2 Low Profile Housings (<3.5" tall)
- Durable Diecast Construction
- 5 Distributions (3, FT & 5W)
- 5 Lumen Packages Standard (12 - 42,000 lm)
- 2 Standard Color Temperatures (4K & 5K)
- IP-65 Rated Luminaire
- Factory or Field Install House Side Shield
- Optional 7-Pin, IMSBT Sensor and AirLink Blue Wireless Controls
- 4 Mounting Options



# Mounting

## Pole Mount



Standard Mounting  
to Square Pole

**B2** Drill Pattern

Round Pole Adapter  
Accessory

## Slip Fitter



Mounts to standard 2  
3/8" Tenon (Vertical or  
Horizontal)

90 degree adjustable  
knuckle (limited to 0-45  
degrees above horizon)

## Trunnion



Trunnion mount to any  
surface with 5/16" bolts  
(provided by others)

Tilt not to exceed 45  
degrees up from  
horizontal.)

## Wall Mount



Wall mount bracket with  
universal plate

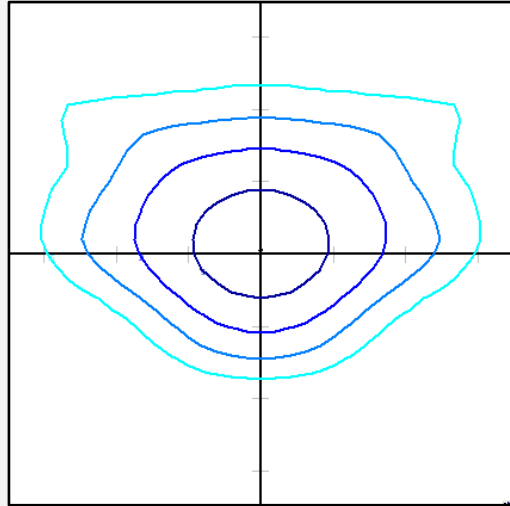
Easily mounts to a 4"  
octagonal or square  
junction boxes

Compatible with Conduit  
Wiring Box Accessory

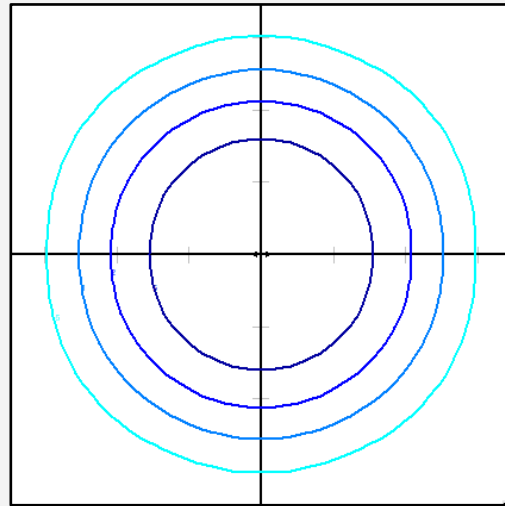


# Performance

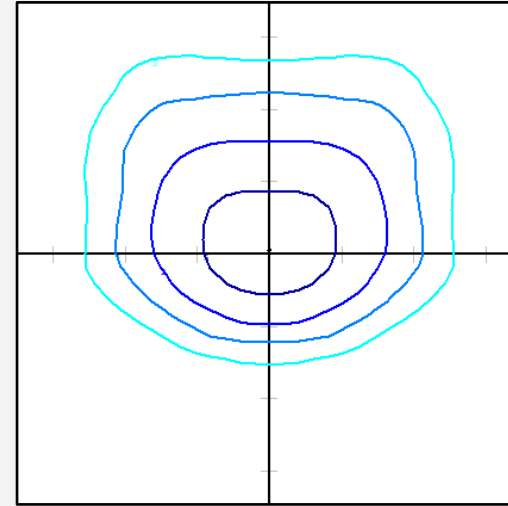
## Area/Wall Distributions



Type 3



Type 5 (5W)



Type 4 (FT)

4000K

5000K

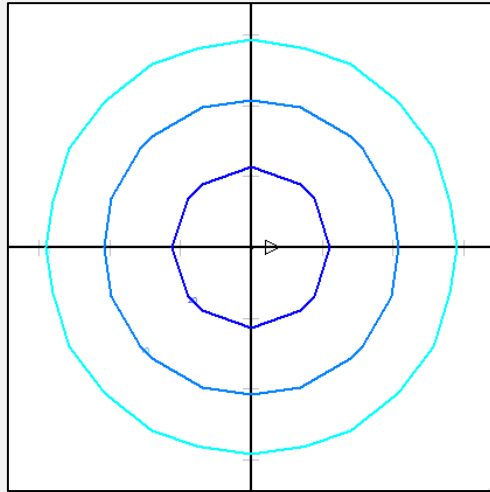
Lumen Pkg.	12K lm	18K lm	24K lm	28K lm	42K lm
Wattage	85	122	175	200	296
LPW	147	147	140	142	140



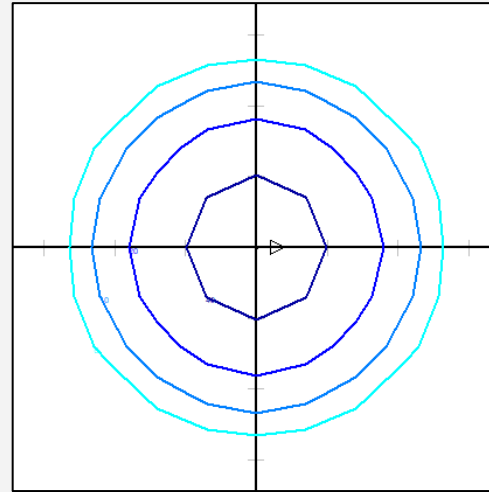


# Performance

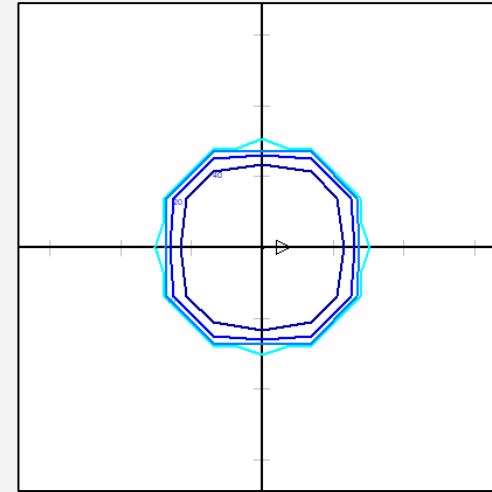
## Flood Distributions



**7 x 7 (5W)**



**6 x 6 (W)**



**4 x 4 (M)**

4000K

5000K

Lumen Pkg.	12K lm	18K lm	24K lm	28K lm	42K lm
<b>Wattage</b>	85	122	175	200	296
<b>LPW</b>	150	151	144	146	144

# Performance Comparison



**Not all lumens  
are created equal**

**SSW-LED-03L-FT-UNV**

Lumens: **3,143**  
Watts: 23.00  
Lumens/Watt: 137.00

Mtg.Ht.: 12'  
Initial Levels

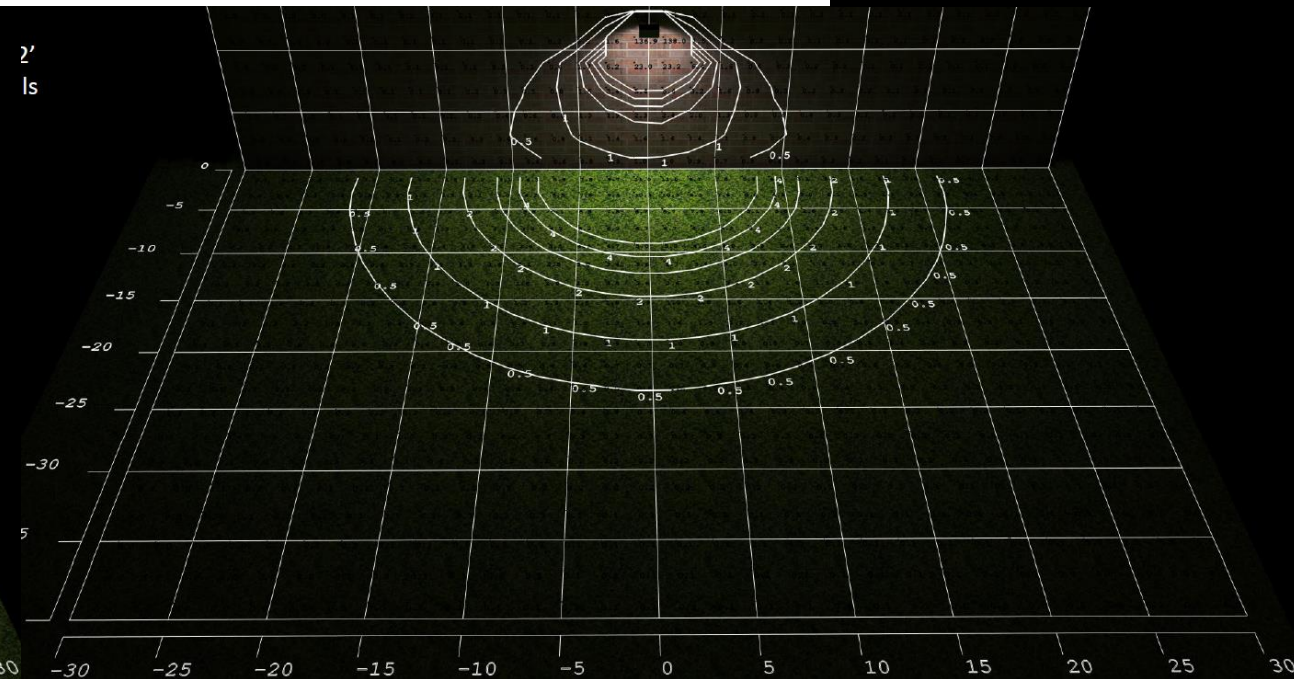
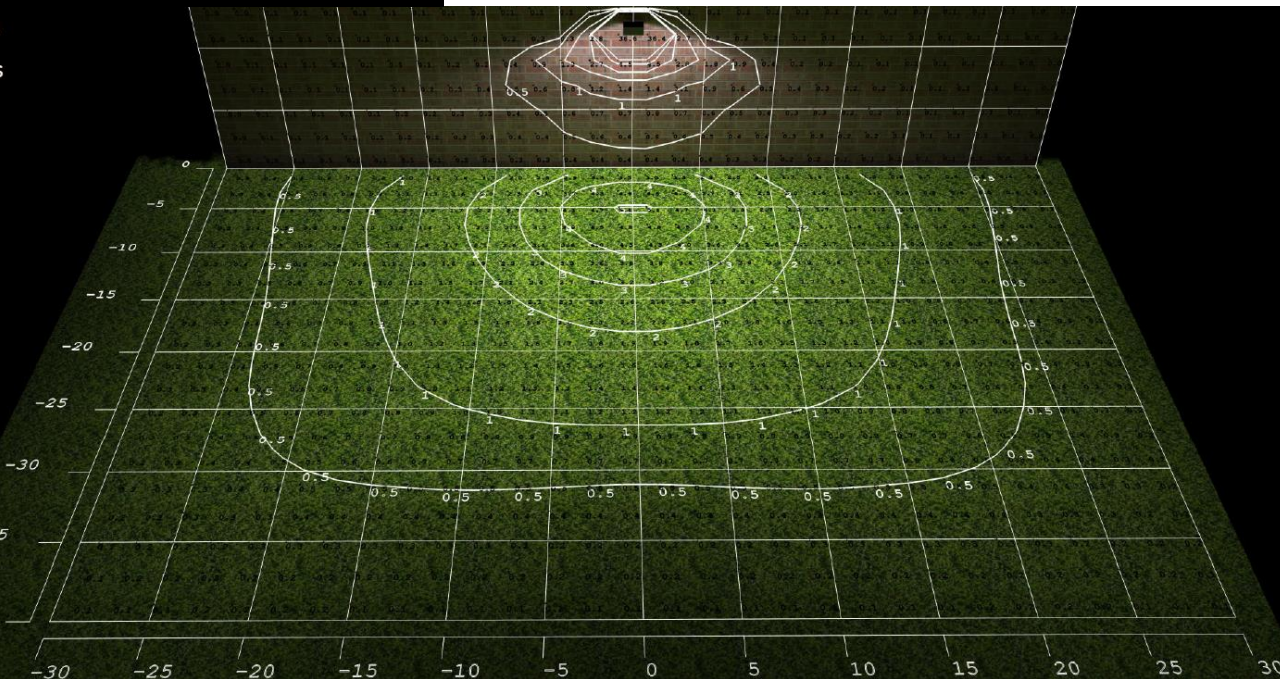


**AcuityBrands.**

**OLWX1\_LED\_40W\_40K**

Lumens: **4,002**  
Watts: 38.82  
Lumens/Watt: 103.60

Mtg.Ht.: 12'  
Initial Levels



# Controls

## Twist-Lock Receptacle



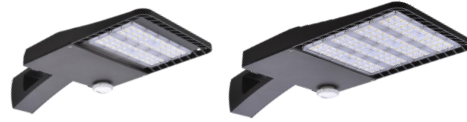
- NEMA 7-Pin Receptacle
- Shorting cap **not** included (accessory)
- Accepts twist lock photocell or wireless control device

## Programmable Occupancy Sensor



- IMSBT or ALBSC
- Programming via phone app to change settings
- Default - High: 100%, Low: 10%, photocontrol function disabled

# Side by Side Comparison



	Commercial Area	Slice/Mirada
Price (\$, \$\$ or \$\$\$)	\$	\$\$
Lumen Range	12,000 – 42,000	6,000 – 78,000
Efficacy Range	135 – 147	112 - 163
# of Distributions	5 (2 Flood Distr.)	9 + Rotatable
Photometric Performance (1-5 Stars)	★ ★ ★	★ ★ ★ ★ ★
Drivers	Fixed Output	Factory Programmable
Controls	BT Occupancy, 7-Pin, AirLink Wireless	Button PC, BT Occupancy, 7-Pin, AirLink Wireless
Finishes	Bronze Only	Standard + Custom Colors w/DuraGrip Finish
Assembly Location	China/USA	USA
IP Rating	65	66
Vibration Rating	1.5G	3G

# Availability



Housing	Lumens	Distr.	Voltage	CCT	Finish	Mounting	Availability
SSA	12,000 18,000 24,000	FT	UNV	4000K 5000K	Bronze	Pole Slip Fitter Trunnion Wall Bracket	<b>In Stock</b>
SMA	28,000 42,000						

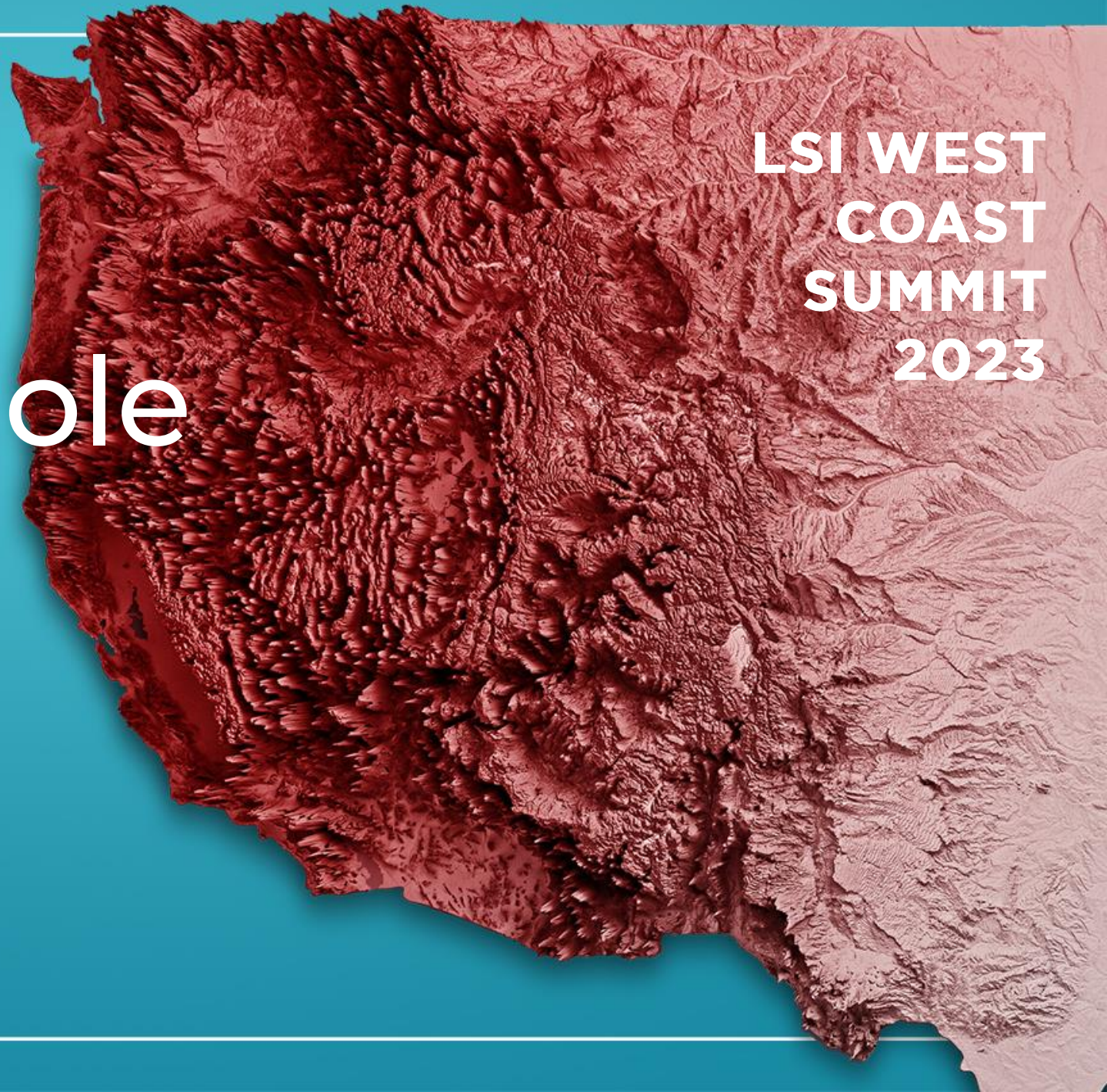
Options	Availability
Type 3, 5, M, W	<b>5-Day</b>
Integral House Side Shield	<b>5-Day</b>
7-Pin	10-Day
IMSBT	10-Day
ALBCS	20-Day
10kV Surge	10-Day





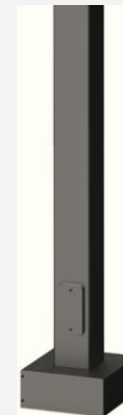
LSI WEST  
COAST  
SUMMIT  
2023

# SSA/SMA Pole Combo





# Combo Overview



## Luminaire Info

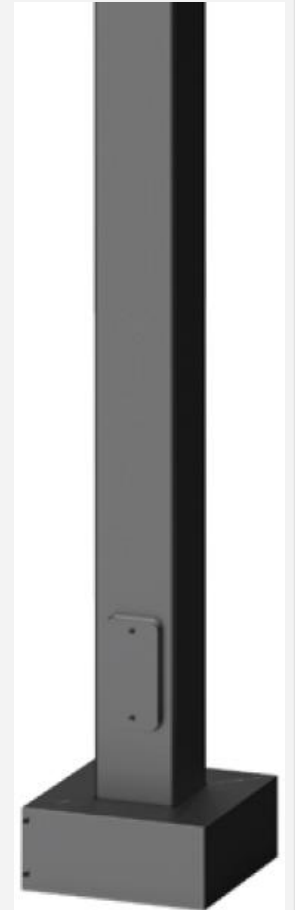
- 5 Lumen Packages up to 42,000 Lumens
- Single, Double, Triple & Quad Configurations
- 4000K & 5000K CCT (70CRI)
- Universal Voltage (120-277V)
- Type FT
- Bronze Finish

## Pole info

- 20' and 25' Lengths
- Square Straight Steel Construction
- 4" Square 11 Gauge Wall Thickness
- Base Cover Included
- Pole Base Accommodates 8-11" bolt circles using four  $\frac{3}{4}$ " diameter anchor bolts
- Bronze Dura-Grip Finish



# PXSSA/PXSMA Ordering Guide



## Ordering Guide\*

Product Series	Lumens-Quantity	Distribution	Voltage	CCT	Square Straight Pole	Color	Anchor Bolts
PXSSA	12L - 12,000	1 - Single Head	UNV - Universal (120-277V)	40 - 4000K 50 - 5000K	4SQ20 - 4", 20 feet 11-gauge 4SQ25 - 4", 25 feet 11-gauge	(Blank) - Bronze Finish	AB - with anchor bolts/template LAB - Less anchor bolts/template
	18L - 18,000	2 - 2 @ 90° or 180°					
	24L - 24,000	3 - 3 @ 90°					
		4 - 4 @ 90°					
PXSMA	28L - 28,000						
	42L - 42,000						

Example: **PXSSA 18L 1 5W UNV 40 4SQ20**

**Note:** To pre-ship anchor bolts, order combo less anchor bolts (LAB) and order anchor bolts separately as an additional line item.

\*15 piece luminaire head order limit for 5-day quick ship, 25 piece order limit for 10-day quick ship qualification



# Sales Flyer





**POLES | Dual Deal**  
5-Day Quick Shipment Program

## SSA/SMA

Luminaire / Pole Combination  
5-Day Quick Shipment Program

LSI offers our most competitive area light paired with our highest quality poles in a deal that offers... **Speed & Savings**

**Commercial Area (SSA/SMA) Luminaire**

- 5 Lumen Packages up to 42,000 Lumens
- Single, Double, Triple & Quad Configurations
- 4000K & 5000K (70 CRI)
- Type FT
- Bronze Finish

**5-Day Quick Ship**

- Poles are manufactured and shipped from Cincinnati, OH within 5 days
- Luminaires are stocked in Burlington, NC and shipped within 5 days.
- All Configurations Available Less Anchor Bolts (Anchor Bolts Available to Ship Before Product)

**4SQ Series Poles**

- Square Straight Steel Construction w/Base Cover Included
- 4" Square 11 Gauge Wall Thickness
- 20' & 25' Lengths
- Included Pole Base Accommodates 8"-11" bolt circles using four 3/4" diameter anchor bolts
- Bronze Dura-Grip Finish



**Ordering Guide\***

Product Series	Lumen-Quantity	Distribution	Voltage	CCT	Square Straight Pole	Color	Anchor Bolts
PXSSA	12L - 12,000	1 - Single Head	FT - Forward Throw	UNV - Universal (120-277V)	40 - 4000K	4SQ20 - 4', 20 feet 11-gauge	LAB - with anchor bolts/template LAB - Less anchor bolts/template
	18L - 18,000	2 - 2 @ 90° or 180°					
	24L - 24,000	3 - 3 @ 90° 4 - 4 @ 90°					
PXSSA	28L - 28,000						
	42L - 42,000						

*Example:* PXSSA 18L 1 5W UNV 40 4SQ20

\*Note: To pre-ship anchor bolts, order combo less anchor bolts (LAB) and order anchor bolts separately as an additional line item.  
\*15 piece luminaire head order limit for 5-day quick ship, 25 piece order limit for 10-day quick ship qualification

**SSA DELIVERED LUMENS\***

Lumen Package	Distribution	CRI	4000K			5000K			Wattage
			Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	
12L	FT	70	12,341	144	B2-U0-G3	12,208	142	B2-U0-G3	85
18L	FT	80	17,277	143	B3-U0-G3	17,090	141	B3-U0-G3	121
24L	FT	80	23,865	136	B3-U0-G3	23,807	135	B3-U0-G3	175

**LUMINAIRE EPA CHART**

Tilt Degree	Single	D180°	D90°	T90°	TW120°	D90°
0°	0.5	1.0	0.7	1.0	1.0	1.0

\*LED Chips are frequently updated therefore values are nominal.

**SMA DELIVERED LUMENS\***

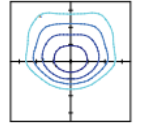
Lumen Package	Distribution	CRI	4000K			5000K			Wattage
			Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	
28L	FT	70	27,547	138	B4-U0-G3	27,249	137	B4-U0-G3	200
42L	FT	70	40,238	136	B4-U0-G4	39,803	135	B4-U0-G4	296

**LUMINAIRE EPA CHART**

Tilt Degree	Single	D180°	D90°	T90°	TW120°	D90°
0°	0.6	1.1	0.9	1.1	1.1	1.1

\*LED Chips are frequently updated therefore values are nominal.

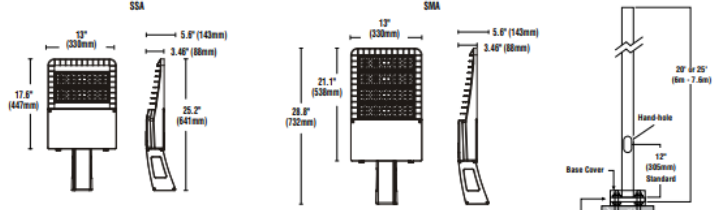
**SSA/SMA Distribution Pattern**



25' Mounting Height/25' Grid Spacing  
 ■ 5' FC ■ 10' FC ■ 15' FC ■ 20' FC

Type FT

**Dimensions**



SSA: 12" (305mm) height, 5.8" (143mm) width, 12.6" (447mm) depth, 25.2" (641mm) mounting arm length.

SMA: 12" (305mm) height, 5.8" (143mm) width, 21.1" (530mm) depth, 28.8" (732mm) mounting arm length.

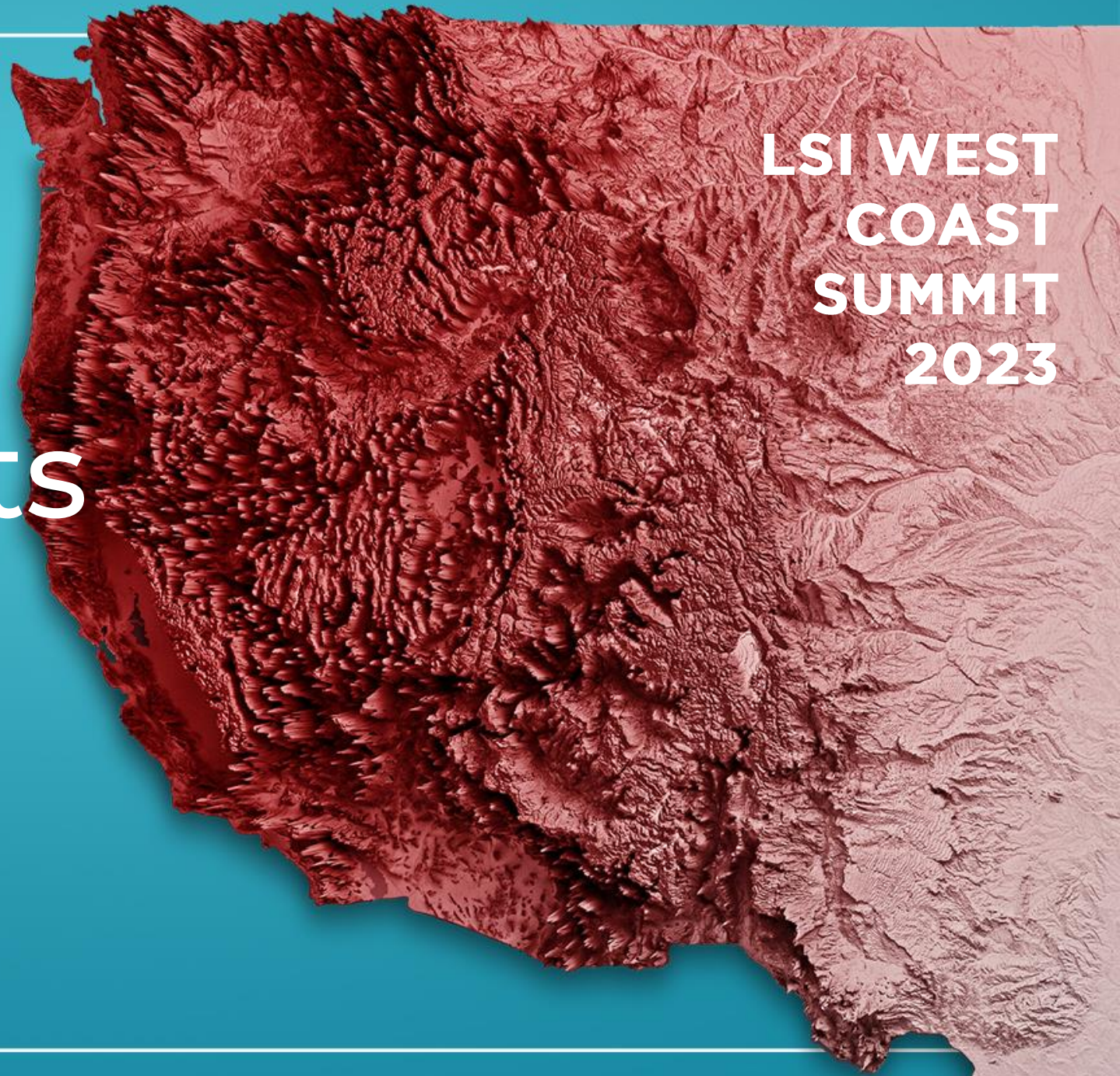
Pole: 20' or 25' (6m - 7.6m) length, 12" (305mm) diameter, 4" anchor bolts, base cover, projection, and foundation by other.

LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242  
 www.lsi-industries.com • (513) 372-3200  
 ©LSI Industries Inc. All Rights Reserved. SELL1003.C1020



**LSI WEST  
COAST  
SUMMIT  
2023**

# Flood Lights





# Architectural Flood - XFLM



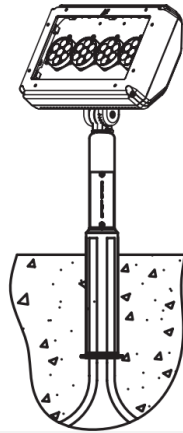
- Architectural housing
- 4000 and 6000 lumen packages
- 6 Flood Distributions
  - Wide (5H x 5V)
  - Medium (4H x 4V)
  - Narrow (4H x 4V)
  - Spot (3H x 3V)
  - Horizontal (5H x 3V)
  - Vertical (3H x 5V)
- Mounting - Standard is Knuckle, optional Yoke
- Brackets: Stanchion, Post-Top, J-Box and Wall
- Accessories – Barn Doors, Shields



# XFLM Accessories

## MOUNTING BRACKETS

**STANCHION MOUNT (SMC)** - 3" OD x .250" x 22.65" cast aluminum with 3/4" NPSM fixture mount, and a standard 2 3/8" tenon. Wiring and internal ground lug accessible through hand hole. Available in standard finishes.



**ARCHITECTURAL JUNCTION BOX (JB)** - Cast aluminum body and extruded matching cover. One-piece EPDM cover gasket. Internal ground screw provided. 3/4" NPSM fixture mount with sealing locknut. Two 1/2" NPSM for conduit entry. For above grade installation only. Available in standard finishes.



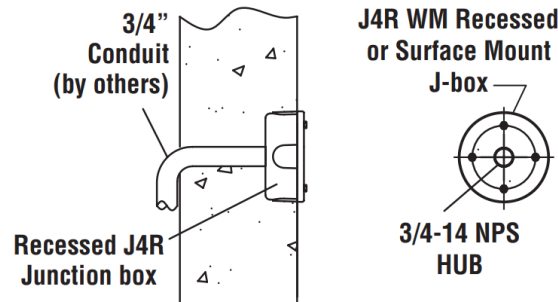
**POST TOP ADAPTOR (PT)** - One-piece cast aluminum – mounts on pole with 2" pipe tenon (2-3/8" OD x 3-1/2" minimum length) or 2-1/2" pipe tenon (2-7/8" OD x 3-1/2" minimum length). Fixture threads into adaptor and attaches to pole with allen set screws. Post Top Adaptor allows mounting of one or two fixtures and 360° horizontal adjustment. Available in standard finishes.



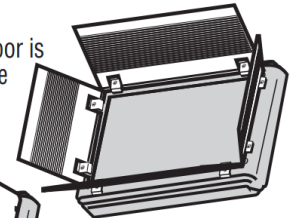
**1/2" THREADED ADAPTOR (TA)** - Machined aluminum pipe reducer adapts 3/4" pipe thread (T-stem) to 1/2" pipe thread provided by others.



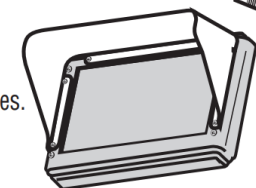
**WALL MOUNT J-BOX (J4 WM or J4R WM SCE)** - Accessory includes J4R J-Box, 507504 3/4-14 NPS canopy, canopy gasket, & 4 cap screws. J4R WM SCE version for surface mount conduit applications includes 2ea 1/2" conduit entries & includes conduit plugs.



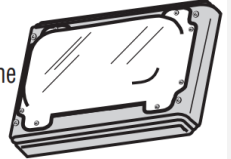
**BARN DOORS (BD)** - Extruded aluminum doors with anti-reflection baffles. Each door is attached with two aluminum clamps with set screws to maintain position. Doors are individually removable. Assembly mounts to die-cast door frame holes. Caution: Not recommended for ground-mounted fixtures in vandal-prone areas. Available in standard finishes.



**GLARE SHIELD (GS)** - Formed 16 ga. steel. Mounts to die-cast door frame holes and may be used with polycarbonate shield accessory. Available in standard finishes.



**POLYCARBONATE SHIELD (PS)** 1/8" clear convex, UV stabilized, thermoformed polycarbonate. Mounts to die-cast door frame holes. May be used with glare shield accessory. Caution: Use only when vandalism is anticipated. Useful life is limited by UV discoloration from sunlight.



# Architectural Flood



# Flood Flag Design Guide



## FLAG LIGHTING GUIDE



U.S. flags must be illuminated when flown at night. Visibility is dependent on the relative positions of the luminaire, flag, and viewer, as well as on ambient light levels and contrast ratios with respect to other objects in the field of view. These rules of thumb should result in a satisfactory installation, regardless of the many variables involved.

1. Always use multiple luminaires to ensure flag is adequately illuminated, regardless of wind direction. Two per flag is good and three per flag is better.
2. Three luminaires in a triangular pattern produce the best effect.
3. Inground fixtures should be setback from the pole one-third to one-half the length of the flag. Floodlights may be setback from the pole one-half to one full pole length.

Light levels shown below are average maintained footcandles from a single luminaire.

Accessories



Pole Height	Flag Size	Fixture Setback	Single Fixture Levels*	Catalog Number	Watts
<b>LED Light Source</b>					
<b>Inground</b>					
20'	3' x 5'	3'	7	XIG-LED-19-350-CW-UE-FL40	22
20'	3' x 5'	3'	16	XIG-LED-19-350-CW-UE-NFL25	23
30'	5' x 8'	4'	7	XIG-LED-19-350-CW-UE-NFL25	23
30'	5' x 8'	4'	14	XIG-LED-19-350-CW-UE-SP10	22
40'	6' x 10'	5'	8	XIG-LED-19-350-CW-UE-SP10	22
50'	8' x 12'	6'	6	XIG-LED-19-350-CW-UE-SP10	22
<b>Flood**</b>					
20'	3' x 5'	3'	17	XFLM-MF-LED-28-HO-CW-UE	36
30'	5' x 8'	4'	7	XFLM-MF-LED-28-HO-CW-UE	36
30'	5' x 8'	4'	12	XFLM-NF-LED-28-HO-CW-UE	36
30'	5' x 8'	4'	23	XFLM-SP-LED-28-HO-CW-UE	36
40'	6' x 10'	5'	13	XFLM-SP-LED-28-HO-CW-UE	36
50'	8' x 12'	6'	8	XFLM-SP-LED-28-HO-CW-UE	36
30'	5' x 8'	4'	18	XFLM-NF-LED-49-HO-CW-UE	64
40'	6' x 10'	5'	19	XFLM-SP-LED-49-HO-CW-UE	64
50'	8' x 12'	6'	13	XFLM-SP-LED-49-HO-CW-UE	64
<b>HID Light Source</b>					
<b>Inground</b>					
20'	3' x 5'	3'	4	RDS-100MH-120-SPV	129
30'	5' x 8'	4'	3	RDS-100MH-120-SPV	129
40'	6' x 10'	5'	5	RDR-150MH-120-SPV	185
50'	8' x 12'	6'	4	RDR-150MH-120-SPV	185
<b>Bullets</b>					
20'	3' x 5'	10'	6	BAL-SP/C BM-150MH-SCB	185
30'	5' x 8'	15'	3	BAL-SP/C BM-150MH-SCB	185
40'	6' x 10'	20'	2	BAL-SP/C BM-150MH-SCB	185
50'	8' x 12'	25'	5	BAL-SP/C BM-150MH-SCB	185
<b>Floods</b>					
20'	3' x 5'	10'	4	DRS-100MH-MT-SP-BRZ	129
30'	5' x 8'	15'	3	DRS-150CMH-MT-SP-BRZ	185
40'	6' x 10'	20'	4	DRS-250MH-MT-SP-BRZ	291
50'	8' x 12'	25'	5	DRS-400MH-MT-SP-BRZ	452

\*Average Maintained Footcandles with meter tilted 45-degrees. Different levels will result with other meter tilt factors.  
 \*\*LED Floodlights are aimed straight up.



# Traditional Floods



- Medium, Flood & Extra Wide Distributions
- 1,000 – 50,000 Lumens
- Available in 3000K, 4000K & 5000K CCT
- 70 CRI Standard
- Optional Button Photocell
- Bronze, Black, Silver & White Finishes



**TSFL 1L/2L/3L**

Wattage: 14 - 28  
Lumens: 1,682 - 3,261  
LPW: 103 - 125



**TMFL 4L/5L/7L**

Wattage: 41 - 61  
Lumens: 5,343 - 7,237  
LPW: 105 - 121



**TLFL 9L/12L/16L**

Wattage: 62 - 121  
Lumens: 8,654 - 17,244  
LPW: 127 - 157



**TXFL 20L/25L**

Wattage: 142 - 180  
Lumens: 21,750 - 25,040  
LPW: 139 - 153



**T2XFL 33L/40L/50L**

Wattage: 220 - 357  
Lumens: 33,210 - 50,130  
LPW: 141 - 151



**LSI WEST  
COAST  
SUMMIT  
2023**

# Sports Lighting



LSI is the  
*official lighting partner*  
of USA Pickleball



*Exclusive Lighting Partner*  
for the APP Tour





# ZONE OVERVIEW



ZNL



ZNM



ZNX



ZNIA



ZNF



# Zone Sport Court Light - Overview



- Medium and Large Housing Size
- 24K, 30K, 36K, 42K, 48K, 50K, 55K, 60K, 65K, and 78K Lumen Packages + Custom Lumen Packages.
- Dedicated Silicone Court Optic (CT)
- Optional High Voltage
- 3000K, 4000K, 5000K CCT's (70 CRI)
- Optional Standalone and Wireless Controls
- Integral House Side Shield (IH) and Louver (IL) Options Available



# Zone Sports Light - Shielding



CT

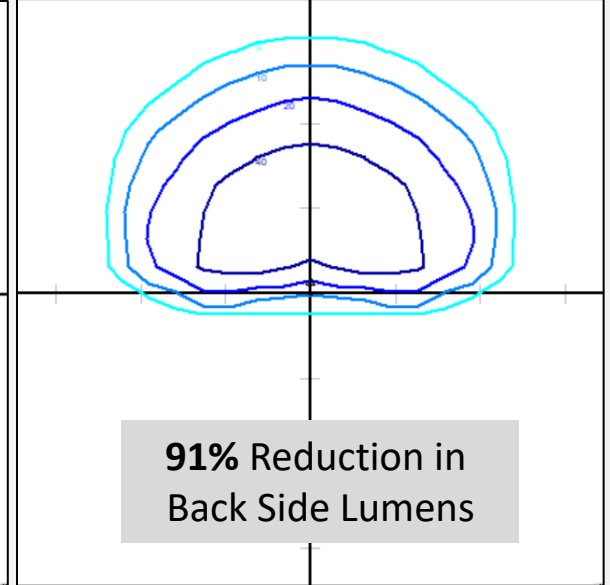
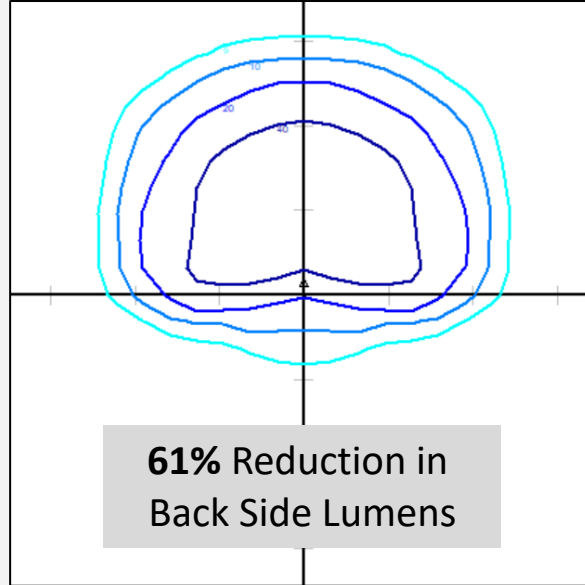
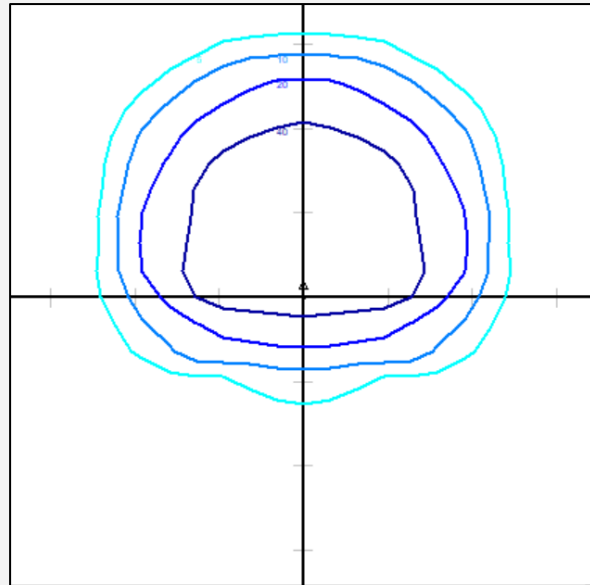
CT w/IH

CT w/IL

IL



IH



Court Side Lumens	48,749 (82%)	43,748 (91%)	37,120 (97%)
Back Side Lumens	10,697 (18%)	4,154 (9%)	992 (3%)
Total	59,446	47,902	38,112



# Zone Slice Sport Court Light - Overview



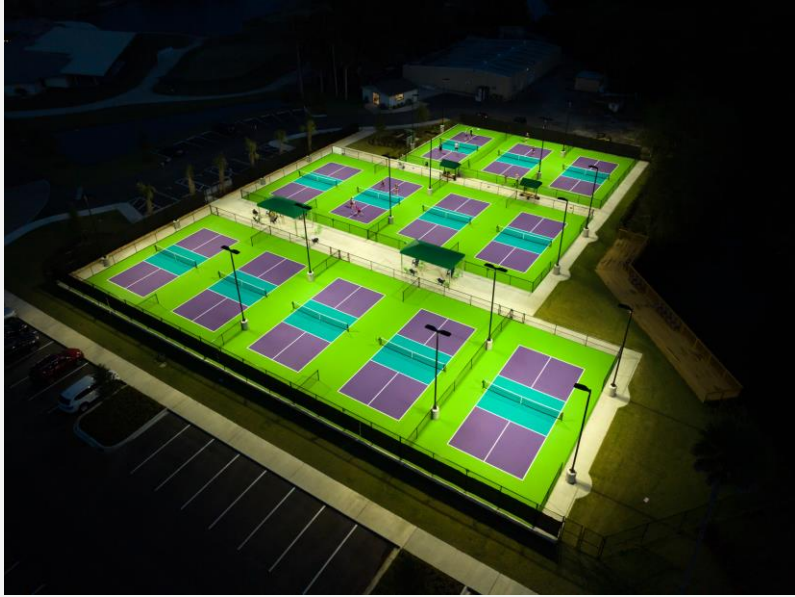
**ZONE**

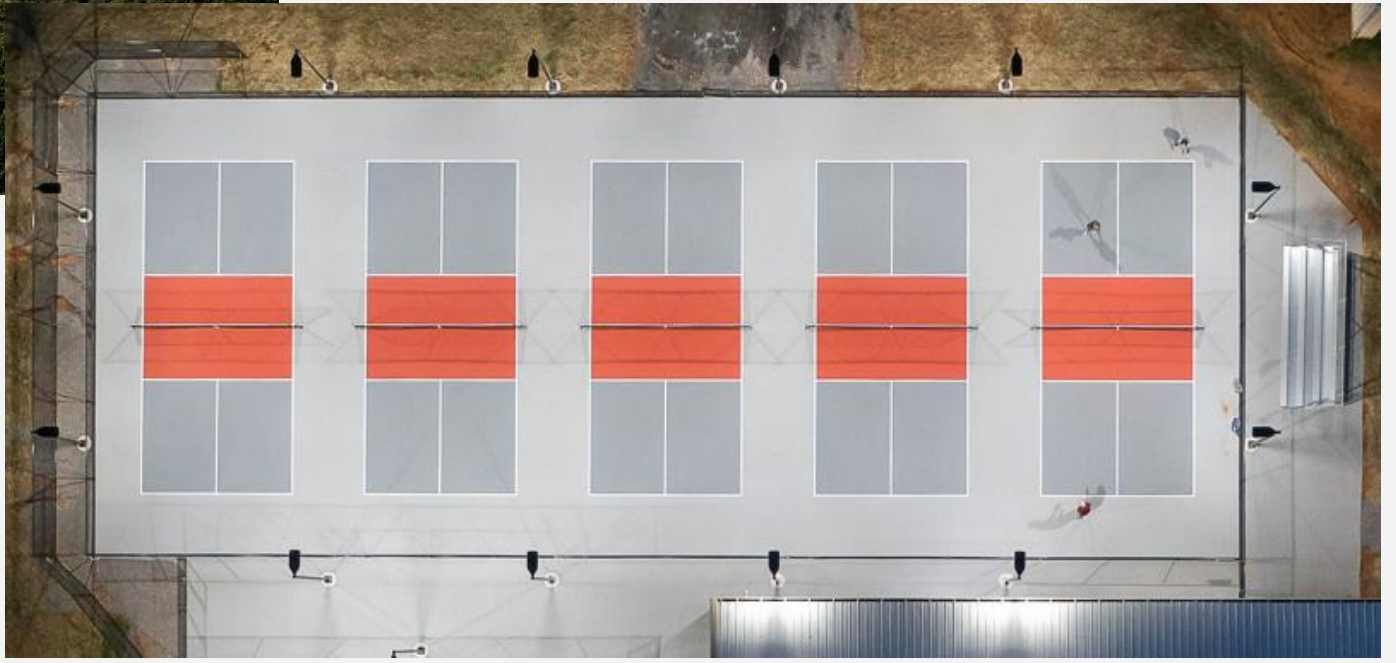
- Medium Housing Size Only
- 24K, 30K, 36K, 42K, 48K, 55K Lumen Packages + Custom Lumen Packages.
- Dedicated Silicone Court Optic (CT)
- Optional High Voltage
- 3000K, 4000K, 5000K CCT's (70 CRI)
- Optional Standalone and Wireless Controls
- Integral House Side Shield (IH) and Louver (IL) Options Available



# Retrofits





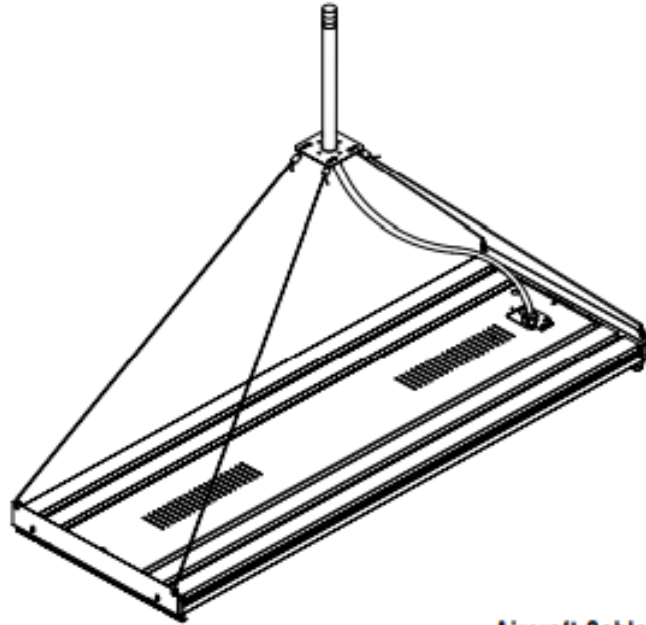




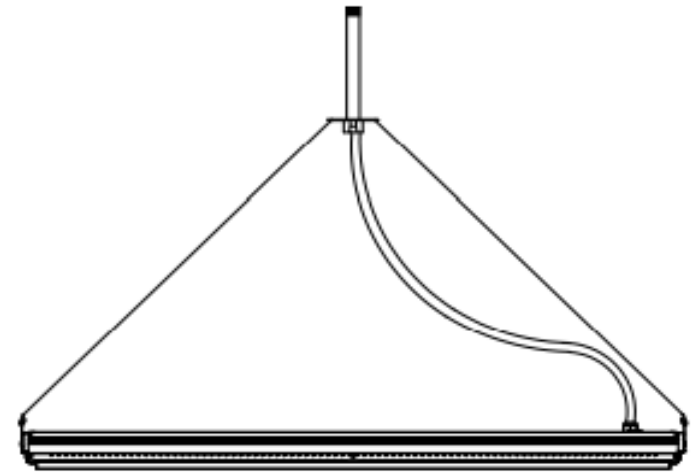
# Zone Indirect Sports Lighting



**ZONE**



**Aircraft Cable Hub Kit (ACH)**









# Zone Sports Flood

- New construction or retrofit
- Small college, K-12, municipal, parks and recreation fields
- Also ideal for large area high lumen general flood applications
- Replaces 1000 or 1500 Watt HID one for one
- Lower weight and EPA than HID
- 70,000, 85,000 & 100,000 lumens
- UNV & HV
- 4000 and 5000K
- Yoke mounting
- NEMA2, NEMA3, NEMA4, NEMA5, and NEMA 6 Distributions



# ZONE SPORTS FLOOD



## THERMAL MANAGEMENT

Heatsinks designed with a broad heat radiation surface area to effectively cool LEDs for a life of up to 70,000 hours.

## OPTICS

4 unique NEMA flood distributions.

## LIGHT ENGINE VENTS

Allow convection cooling of LEDs for superior performance and long life.

## INSTALLATION

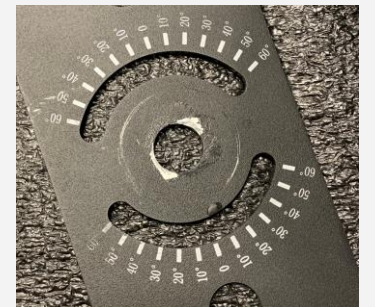
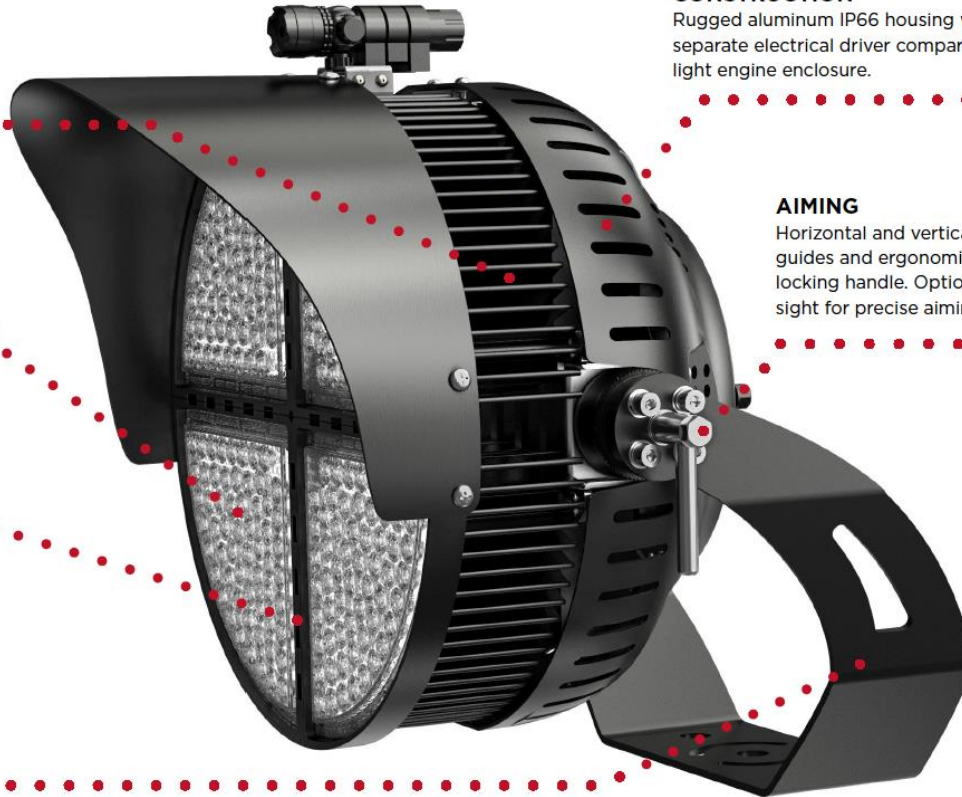
Heavy duty yoke mounting

## CONSTRUCTION

Rugged aluminum IP66 housing with a separate electrical driver compartment and light engine enclosure.

## AIMING

Horizontal and vertical aiming guides and ergonomic tool-less locking handle. Optional laser sight for precise aiming accuracy.



# ZONE Sports Flood – Comparison



	ZNF	Typical HID
Diameter	20" bolt edge	22.5"
Lumens	70, 85, 100K	115, 170K
Wattage	450, 550, 750	1000+, 1500+
Optics	4	5
Color Temperature	4K, 5K	4K
Rating	IP66	
Weight	38 lbs, 42 lbs	47 lbs, 50 lbs
EPA	2.5	2.8
Warranty	5 yrs	1 yr
Life (lamp) Hours	70,000 (L80)	12,000, 6,000



# Sports Lighting Control System



- Create lighting groups, scenes and schedule events.
- Remote Control of lights from anywhere via web browser on any computer or smart device.
- Single field or multiple fields on multiple locations.
- 5 push buttons in Central Base Station.
- Fixture Controller in each fixture.
- Optional Dynamic Behaviors Software.



Fixture Controller  
(ALSDC)

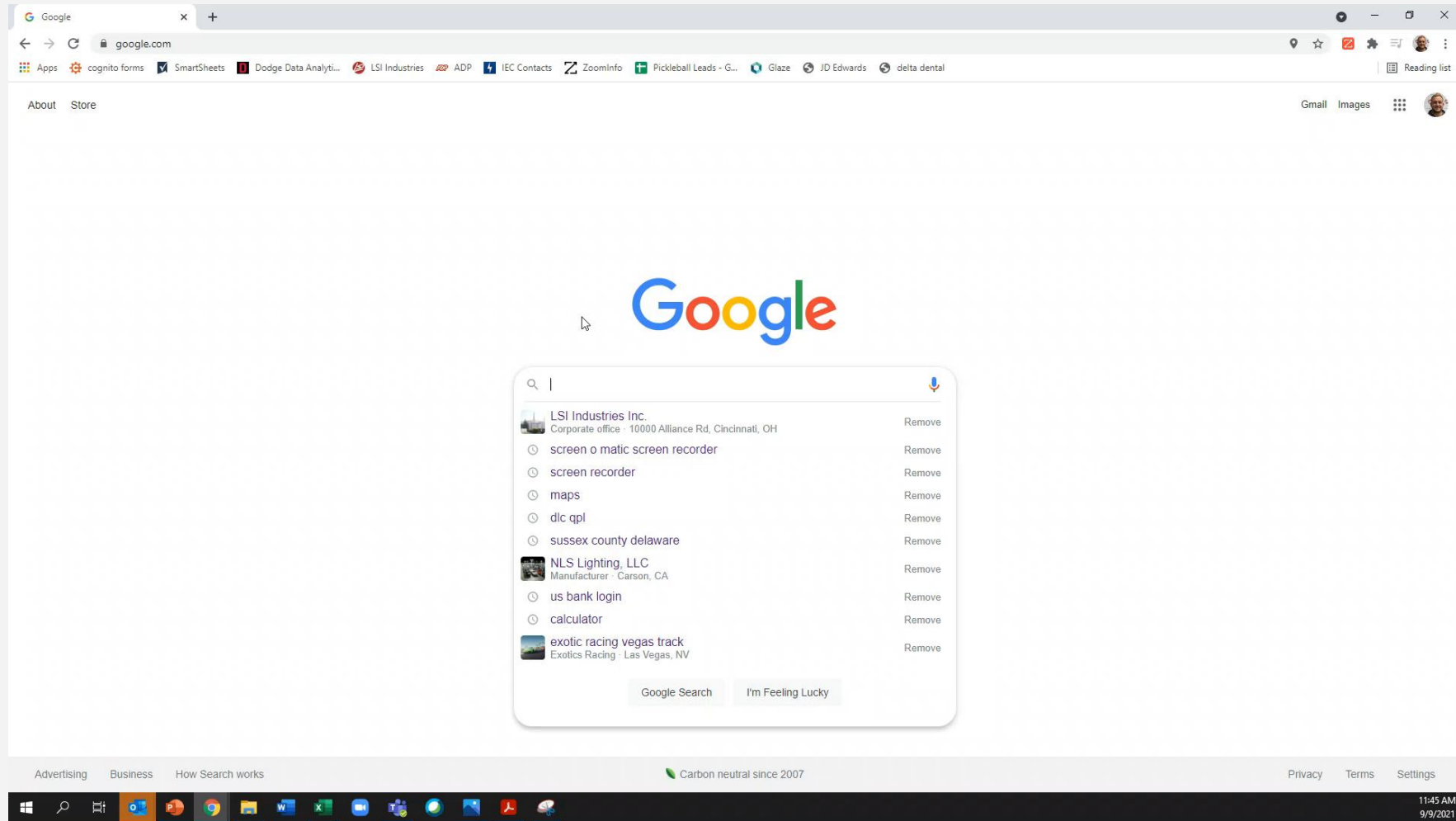


# Sports Lighting Control System

## Dynamic Behaviors Software



# Create-a-Court





# Sports Lighting – Frasure Reps



- 35+ years experience
- Focused exclusively on sports lighting: indoor/outdoor tennis courts, pickleball, outdoor basketball and other selected specialty sports applications.
- Highly personalized lighting consultation for sports venues to satisfy the player, spectator, community and environmental requirements.
- Recognized as one of the most experienced, respected and customer driven sports lighting consultants in the industry.



Bruce Frasure



Patrick Frasure



**LSI WEST  
COAST  
SUMMIT  
2023**

# POLES





 **poles**



- **Poles Designed and Built in Cincinnati, OH**
  - Your Business Supports US Companies and US Workers
- **Making the Product in the US Eliminates Need for Large Stock**
  - We can provide competitive lead-times combined with significant product flexibility
- **Our Supply Chain is More Interconnected With US Economy than Global Economy**
  - Our cost position is less impacted by tariffs, Sulphur caps, international party changes, international disasters, etc.



# COMPLETE VERSATILITY

*Endless Options, Made-to-Order*

Completely configurable: choose from a wide variety of materials, finishes, sizes and styles to best suit your application and budget.






# COMPLETE VERSATILITY


*Endless Options, Made-to-Order*

### POLE TYPES


Square Pole  
14'-39'



Tapered Pole  
20'-39'




Round Pole  
10'-30'




Banner Arms Attachment Available


### POLE TOPS




3" Drill Pattern



5" Drill Pattern





Tenon Bracket





TN120 Bracket


### FIXTURE POLE CONFIGURATIONS


  
Single


  
D90


  
DN90


  
D180

  
Parallel


  
T90

  
TN120

  
QN90

  
Q90


### POLE BASES



Custom Hand Hole Sizes Available

Simple Installation to New and Existing Surfaces

Decorative Base Option Available



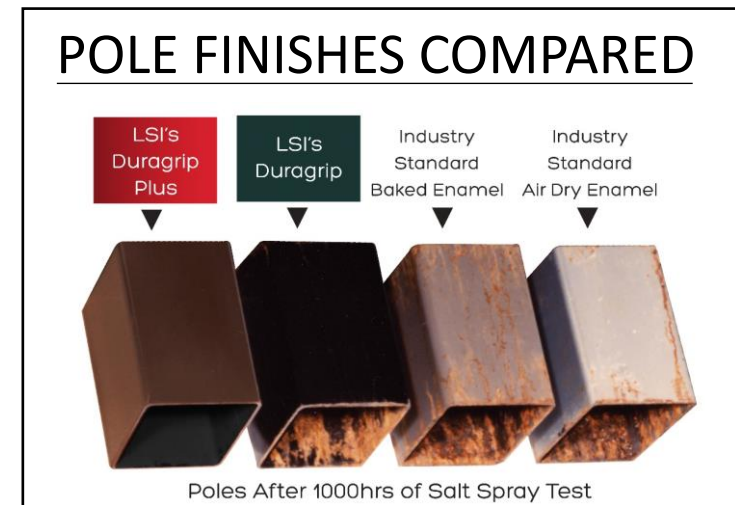




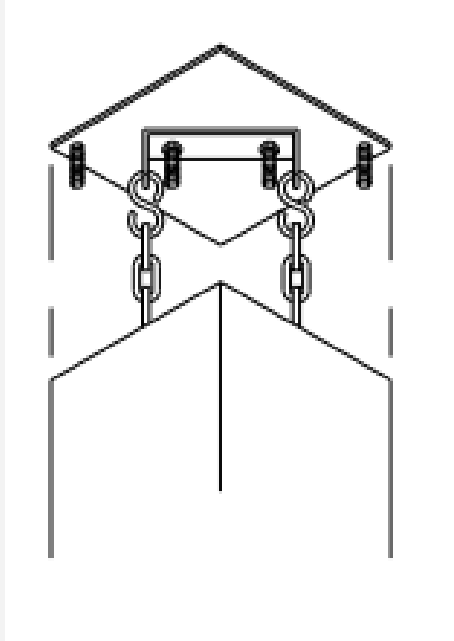
# UNMATCHED DURABILITY

## *Stands up to Harsh Environments*

- **DuraGrip® Protection System as Standard**
  - Shot peening – removes dirt/scale & strengthens surface by inducing compressive residual stress to prevent cracking and extend the life
  - Neutral wash followed by the application of a zirconium treatment to improve powder-coat adhesion and protect from future corrosion
  - Electrostatic application of a polyester powder paint – paint thickness measured in multiple locations to ensure specification adherence
  - Entire pole oven baked to homogenous, non-porous surface
  
- **Optional Addition of DuraGrip® Plus**
  - A non-porous, automotive-grade corrosion coating is applied to the lower portion of pole interior, sealing and protecting it from corrosion – extends warranty to 7 years



# Vibration Dampening

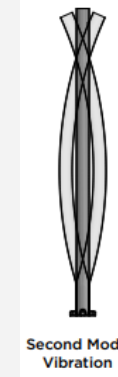


- 4' and 5' square pole dampers supplied with (2) 15' vinyl coated chains
- 6' square pole dampers supplied with (2) 20' vinyl coated chains

Harmonic (Probably Fine)



Resonance (Get a Dampener)



## Applications



Open Landscape



Cities/Mountains



Airports



Parking Decks, Bridges



Local Conditions





**LSI WEST  
COAST  
SUMMIT  
2023**

# Poles

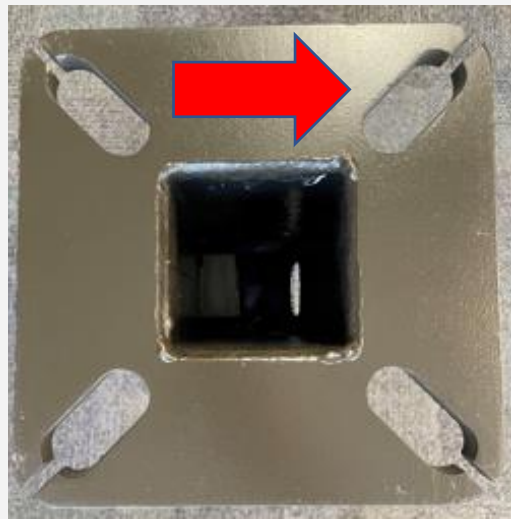
Universal Replacement  
Poles



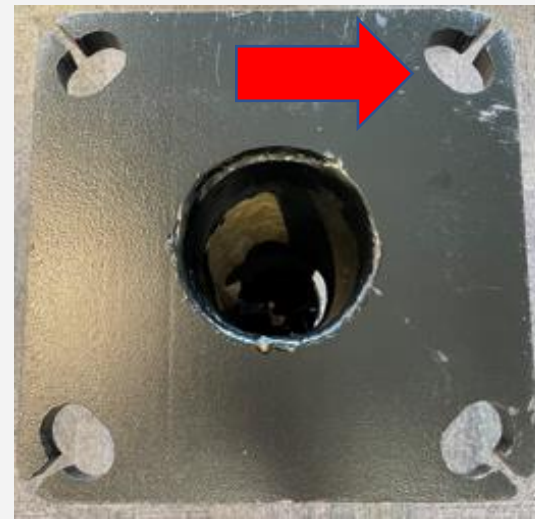
# UNIVERSAL REPLACEMENT POLES

- Universal Poles are a solution to the inconsistency/unavailability of measuring a Bolt Circle.
- Utilizes slots on a baseplate as opposed to notches.
- Help the contractor rest easy at night with out worrying if the pole is going to fit over the existing anchor bolts.

Universal



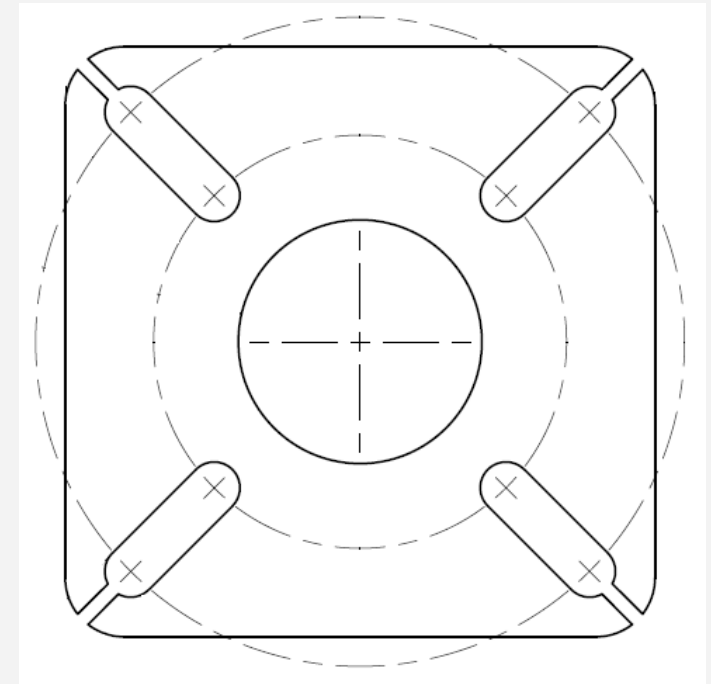
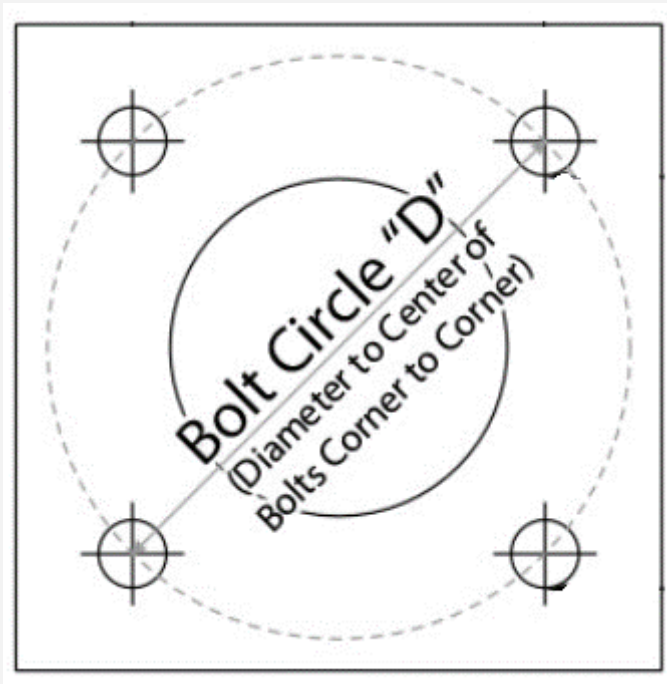
Standard



# UNIVERSAL REPLACEMENT POLES

- **What is a bolt circle?**

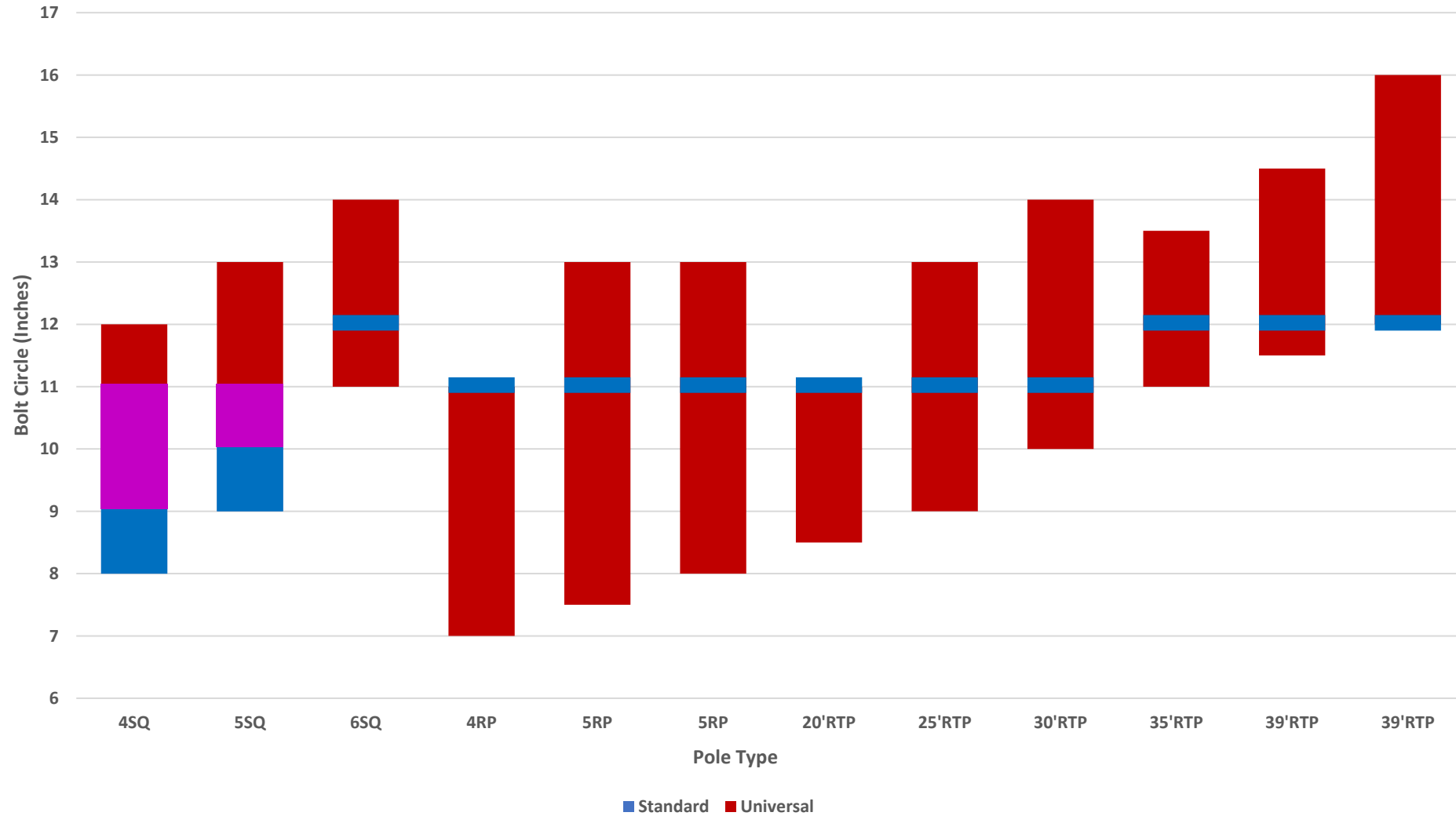
- The diameter of an imaginary circle that is formed by the centers of each mounting bolt.





# STANDARD VS UNIVERSAL REPLACEMENT

LSI Bolt Circle Coverage





**LSI WEST  
COAST  
SUMMIT  
2023**

# Poles

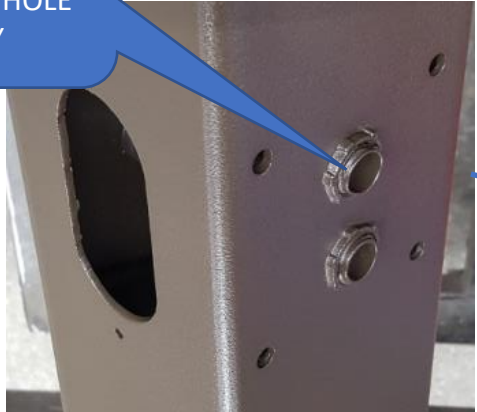
Power at the Pole





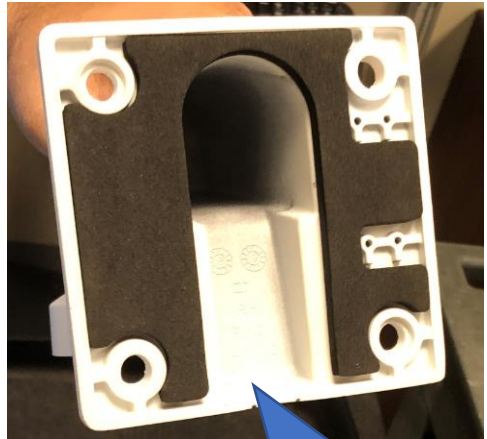
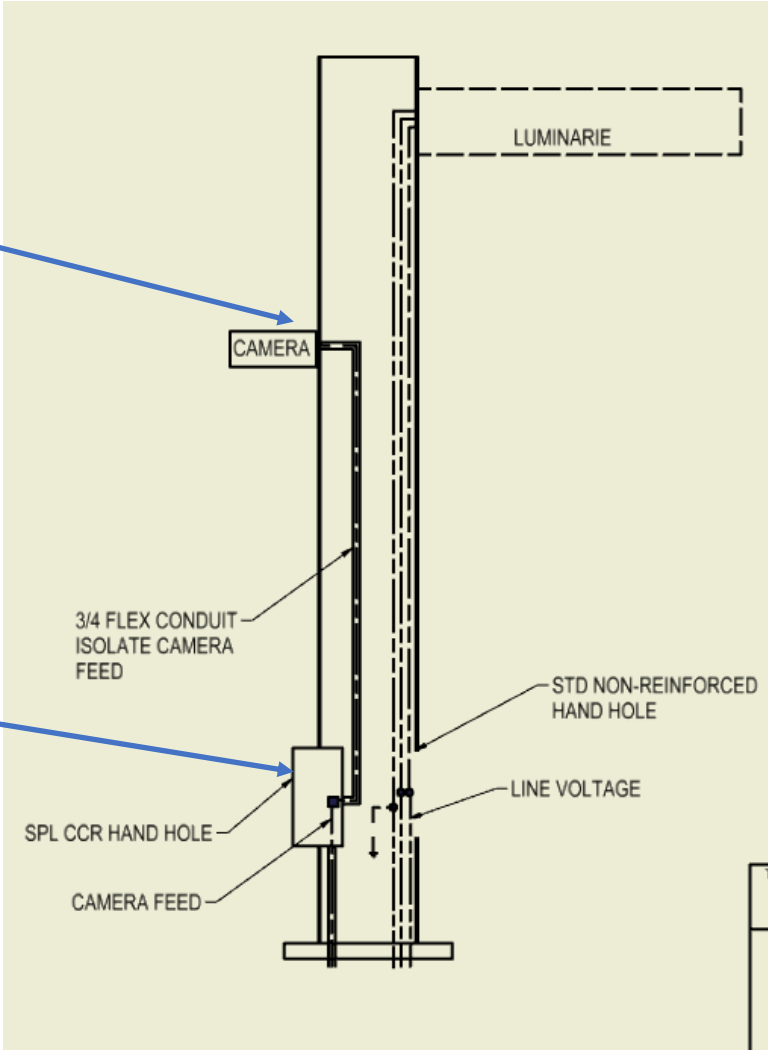
# CONDUIT RACEWAY

SINGLE AND D180 PRIMARY CONNECTIONS MADE ON SAME SIDE OF POLE. EXTRA HAND HOLE FOR EASE OF ASSEMBLY



DUAL K/O'S FOR WIRE ENTRY

INTERNAL CONDUIT



EXAMPLE BRACKET CAVITY USED FOR PRIMARY CONNECTIONS.

NOTE- IF CAVITY IS NOT AVAILABLE, CONSULT FACTORY.



# CONDUIT RACEWAY

- Available on Standard and Universal Square Poles
- Single and Dual (D180) Mounting Configurations
- 3/4" Flex Conduit
- Isolated Raceway - Separates Low and High Voltage

# CR APPLICATION EXAMPLES

Surveillance



Campus Call Boxes



Wi-fi Extenders







**LSI WEST  
COAST  
SUMMIT  
2023**

# Poles

Direct Burial





# Direct Burial Poles

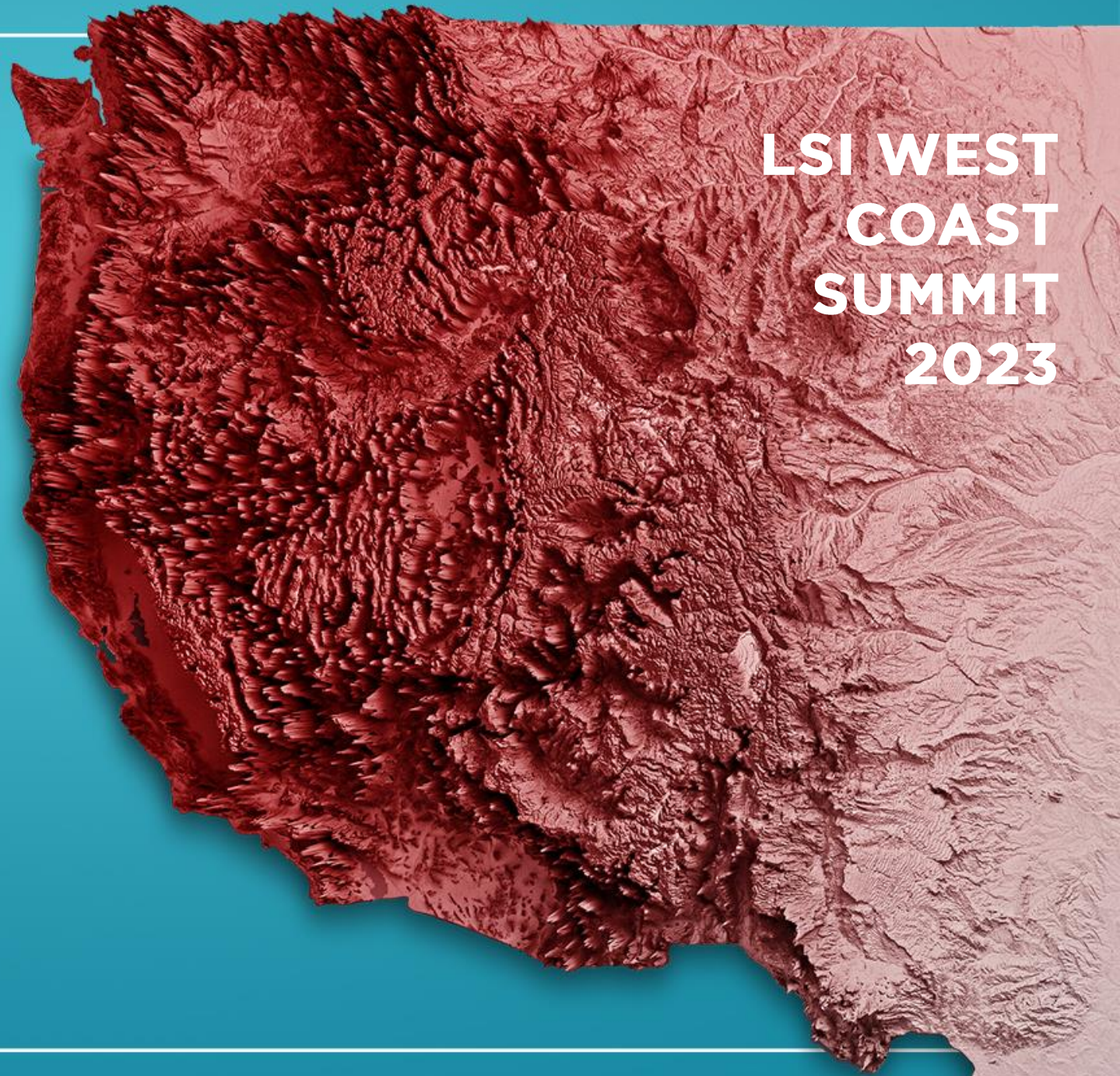
- Benefits
  - Faster installation and labor savings
  - Eliminates need for bolt circle templates and anchor bolts
  - Eliminates base plate weld providing longer fatigue life and reduced chance of failure
  - Ground acts as a natural damper, reducing the risk of wind induced vibration
- Disclaimer
  - Due to geographic variability in soil conditions, LSI Industries cannot provide drilled hole diameters and depths nor recommend supporting materials filled around the pole, i.e. gravel, concrete, etc.; consult engineer for foundation details ensuring pole foundation strength, water exclusion and local code compliance.



**LSI WEST  
COAST  
SUMMIT  
2023**

# Poles

Precast Concrete Bases



# What Is a Precast Base

- Fully customizable pre made concrete bases
- A replacement option to pouring concrete bases in place
  - Get rid of sonotubes
- Makes for an easy install and eliminates a huge time suck on site
- Consistent quality





# Precast Concrete Bases vs Pour In Place

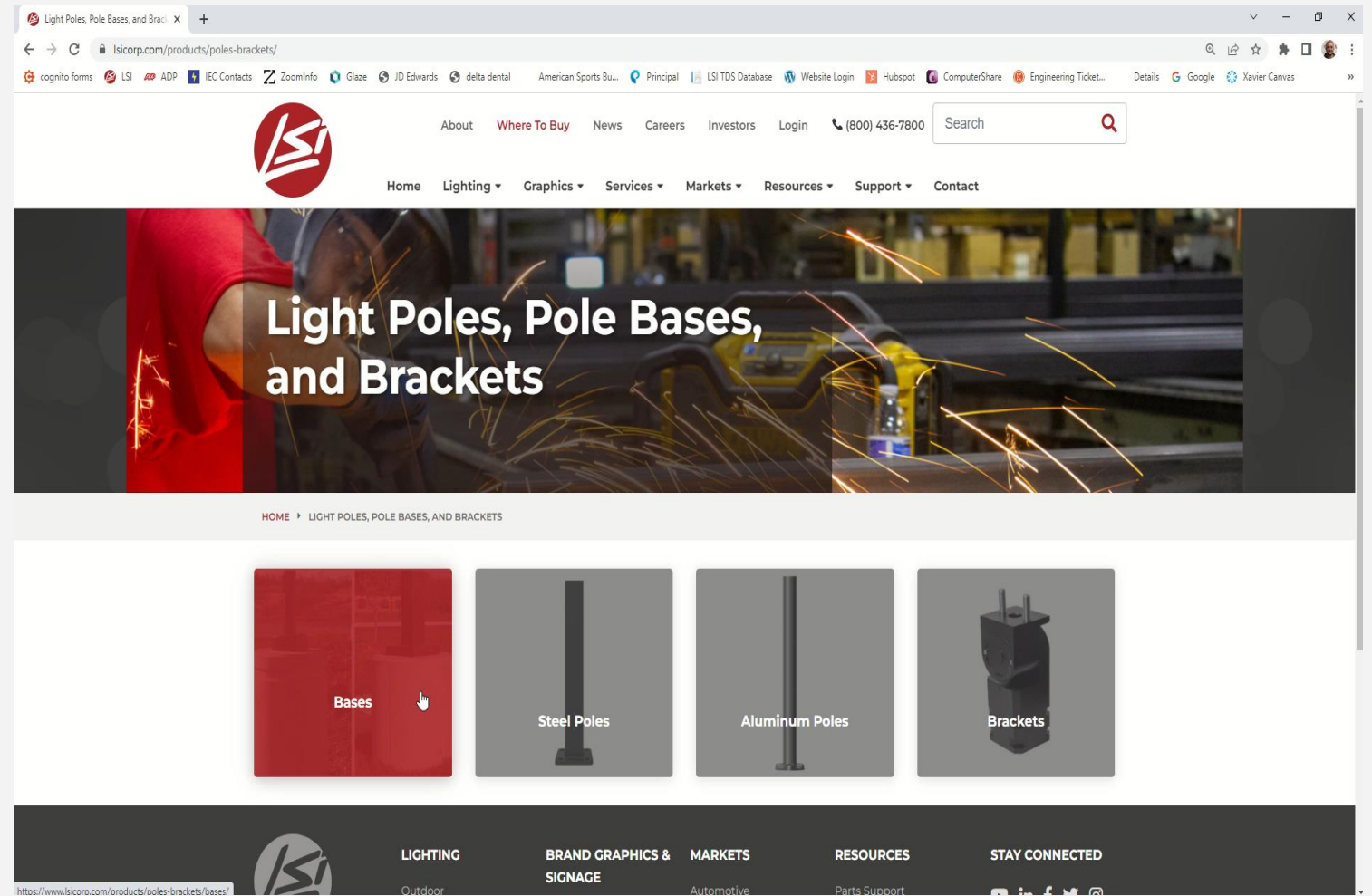
	PRECAST POLE BASES	POURED BASES
LOOK	Precast - Clean <i>*Beauty Ring Available</i> ✓	Poured - Candy Stripe from Sonotube
CONCRETE STRENGTH	5,000 PSI ✓	3,500 PSI
INSTALL TIME	45 Minutes ✓	3+ Days
UNIFORMITY	Consistent High Quality ✓ <small>Constructed under Climate Controlled Conditions</small>	Weather Dependant
SCHEDULE FLEXIBILITY	Install When You are Ready ✓	Dependent on Concrete Company's Schedule
# OF VENDORS	Just One Vendor for Contractors ✓ 1 - LSI	Multiple Vendors for Contractors 1 - Concrete    3 - Anchor Bolts 2 - Rebar        4 - Sonotube





# How to Order

- No standard specs – fully customizable
  - Price is varied
- LSI will not provide recommendations
  - Not soil experts
- Send filled out form to quotes person or fill out form online



# QUESTIONS?



# Thank You!

