



# ZONE™ Large (ZNL)

## Outdoor Sports Light



IP66 IK08



ZONE

### OVERVIEW

Lumen Range	50,000 - 78,000
Wattage Range	375 - 648
Efficacy Range (LPW)	114 - 146
Weight lbs (kg)	60 (27.2)
Control Options	IMSBT, ALB, ALS, 7-Pin

### QUICK LINKS

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

## FEATURES & SPECIFICATIONS

### Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 68 lbs in carton

### Optical System

- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated seal.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in distribution types CT and FT.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 95%.
- Zero uplight.
- Available in 5000K, 4000K, and 3000K color temperatures per ANSI C78.377.
- Minimum CRI of 70
- Integral louver (IL) and integral half louver (IH) options available for enhanced back-light control.

### Electrical

- High-performance driver features overvoltage, under-voltage, short-circuit and over temperature protection.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).

- L90 Calculated Life: >100k Hours (See Lumen Maintenance on Page 3)
- Total harmonic distortion: <20%
- Operating temperature: 50L and 60L: -40°C to +50°C (-40°F to +122°F). 65L and 78L: -40°C to +40°C (-40°F to +104°F)
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

### Controls

- Optional integral passive infrared Bluetooth™ programmable motion and photocell sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- LSI's AirLink wireless control system options allow for programming and group control while reducing energy and maintenance costs and optimizing light quality (see controls section for more details).

### Installation

- Designed to mount to square or round poles.
- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment.
- Included terminal block (accepts up to 12 ga. wire).

- 5' Dimming and Power leads included when Fixed Mounting Studs are ordered.
- Utilizes both B3 and B5 drill patterns for easy fastening of LSI products. (See drawing in poles section).

### Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to <https://www.lsicorp.com/resources/terms-conditions-warranty/> for more information.

### Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- Dark Sky compliant; with 3000K color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications applications are qualified.
- IK08 rated luminaire per IEC 66262 mechanical impact code.
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.
- Patented Silicone Optics (US Patent NO. 10,816,165 B2)

## ORDERING GUIDE

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### TYPICAL ORDER EXAMPLE: ZNL 60L CT UNV 50 ALBCS1 BLK IH

Prefix	Output	Distributions	Orientation	Voltage	Color Temperature
ZNL - Zone Large	<b>50L</b> - 50,000 lms <b>60L</b> - 60,000 lms <b>65L</b> - 65,000 lms <b>78L</b> - 78,000 lms  Custom Lumen Packages <sup>1</sup>	<b>CT</b> - Court Optic <b>FT</b> - Forward Throw	<b>(Blank)</b> - Standard (no rotation) <b>L</b> - Optics rotated left 90° <b>R</b> - Optics rotated right 90°	<b>UNV</b> - Universal Voltage (120-277V) <b>HV</b> - High Voltage (347-480V)	<b>50</b> - 5,000 CCT <b>40</b> - 4,000 CCT <b>30</b> - 3,000 CCT

Controls	Finish	Options
<b>(Blank)</b> - None  <b>Wireless Controls System</b> <b>ALSDC</b> - AirLink Synapse Control System <b>ALSCS02</b> - AirLink Synapse Control System with 12-20' Motion Sensor <b>ALSCS04</b> - AirLink Synapse Control System with 20-40' Motion Sensor <b>ALSDC DB</b> - Airlink Synapse Integral Controller and Dynamic Behaviors Drivers <b>ALBMR1LR</b> - AirLink Blue Long Range Wireless Motion & Photo Sensor Controller (8-15' mounting height) <sup>3</sup> <b>ALBMR2LR</b> - AirLink Blue Long Range Wireless Motion & Photo Sensor Controller (16-40' mounting height) <sup>3</sup>  <b>Stand-Alone Controls</b> <b>EXT</b> - 0-10v Dimming leads extended to housing exterior <b>CR7P</b> - 7 Pin Control Receptacle ANSI C136.4122 <b>IMSBT1L</b> - Integral Bluetooth™ Motion and Photocell Sensor max 8-24' mounting height <sup>3</sup> <b>IMSBT2L</b> - Integral Bluetooth Motion and Photocell Sensor max 25-40' mounting height <sup>3</sup>	<b>BLK</b> - Black <b>BRZ</b> - Dark Bronze <b>GPT</b> - Graphite <b>MSV</b> - Metallic Silver <b>PLP</b> - Platinum Plus <b>GRN</b> - Green <b>WHT</b> - White	<b>(Blank)</b> - None <b>IH</b> - Integral Half Louver (Moderate Spill Light Cutoff) <b>IL</b> - Integral Louver (Sharp Spill Light Cutoff) <b>FMS</b> - Fixed Mounting Studs <sup>4</sup>


**Need more information?**
[Click here for our glossary.](#)
**Have additional questions?**

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### Accessory Ordering Information<sup>5</sup>

CONTROLS ACCESSORIES <sup>5</sup>	
Description	Order Number
Twist Lock Photocell (120V) for use with CR7P <sup>7</sup>	<b>122514</b>
Twist Lock Photocell (208-277) for use with CR7P <sup>7</sup>	<b>122515</b>
Twist Lock Photocell (347V) for use with CR7P <sup>7</sup>	<b>122516</b>
Twist Lock Photocell (480V) for use with CR7P <sup>7</sup>	<b>1225180</b>
AirLink 5 Pin Twist Lock Controller <sup>7</sup>	<b>661409</b>
AirLink 7 Pin Twist Lock Controller <sup>7</sup>	<b>661410</b>
AirLink Synapse Central Base Station	<b>TBD</b>
AirLink Synapse Remote Access 12 month subscription	<b>TBD</b>
AirLink Synapse Dynamic Behavior Software	<b>TBD</b>
Shorting Cap for use with CR7P <sup>7</sup>	<b>149328</b>

FUSING OPTIONS <sup>6</sup>	
Single Fusing (120V)	<a href="#">See Fusing Accessory Guide</a>
Single Fusing (277V)	
Double Fusing (208V, 240V)	
Double Fusing (480V)	
Double Fusing (347V)	

EXTERNAL SHIELDING OPTIONS	
3" External Shield	<a href="#">See Shielding Guide</a>
6" External Shield	

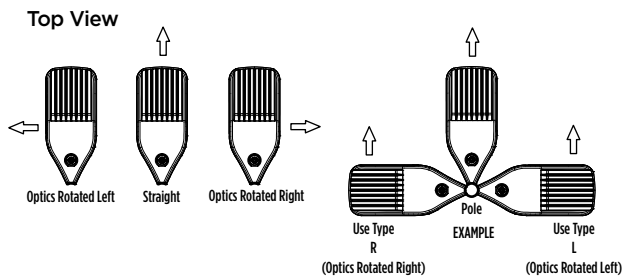
- Custom lumen and wattage packages available, consult factory. Values are within industry standard tolerances but not DLC listed.
- Control device or shorting cap must be ordered separately. See Accessory Ordering Information.
- Motion sensors are field configurable via an app that can be downloaded from your smartphone's native app store. See controls section for more details.
- For use with ZNL upswept arm only. Please see accessory table for ordering details.
- Accessories are shipped separately and field installed.
- Fusing must be located in hand hole of pole. See [Fusing Accessory Guide](#) for compatibility.
- "CLR" denotes finish. See Finish options.



## ACCESSORIES

MOUNTING ACCESSORIES		SHIELDING, POLES & MISC. ACCESSORIES			
Side Arm	<b>Universal Mounting Bracket</b> Mounts to $\geq 3"$ square or round (tapered/straight) poles with (2) mounting hole spaces between 3.5" to 5" <b>Part Number: BKA UMB CLR</b>		Shielding	<b>Integral Louver</b> Field Install Integral Louver provides maximum backlight control by shielding each individual row of LEDs <b>Part Number: 686485</b>	
	<b>Quick Mount Plate</b> True one person installation to existing/new construction poles with hole spaces between 2.4 to 4.6" <b>Part Number: BKS PQM B3B5 XX CLR</b>			<b>Integral Half Louver</b> Field Install Integral Half Louver provides great backlight control without impacting front side distribution. <b>Part Number: 743416</b>	
	<b>15° Tilt Quick Mount Plate</b> True one person installation to existing/new construction poles with hole spaces between 2.4 to 4.6" <b>Part Number: BKS PQ15 B3B5 XX CLR</b>			<b>External Shield</b> External shield blocks view of light source from anyside of luminaire, additional shielding configurations available <b>Part Number: 785970BLK (3") / 785962BLK (6")</b>	
Tenon / Slipfitter	<b>Adjustable Slipfitter</b> Mounts onto a 2" (51mm) IP, 2.375" (60mm) O.D. tenon and provides 180° of tilt (max 45° above horizontal) <b>Part Number: BKA ASF CLR</b>		Poles	<b>Square Poles</b> 14 - 39' steel and aluminum poles in 4", 5" and 6" sizes for retrofit and new construction <b>Part Number: 4SQ/5SQ/6SQ</b>	
	<b>Square Tenon Top</b> Mounts onto a 2" (51mm) IP, 2.375" (60mm) O.D. tenon and allows for mounting up to 4 luminaires <b>Part Number: BKA XNM *</b>			<b>Round Poles</b> 10 - 30' steel and aluminum poles in 4" and 5" sizes for retrofit and new construction <b>Part Number: 4RP/5RP</b>	
	<b>Square Internal Slipfitter</b> Mounts inside 4" or 5" square pole and allows for mounting up to 4 luminaires <b>Part Number: BKA X_ISF * CLR</b>			<b>Tapered Poles</b> 20' - 39' steel and aluminum poles for retrofit and new construction <b>Part Number: RTP</b>	
Wall Mount/ Wood Pole	<b>Wall Mount Bracket</b> Mounts onto vertical wall surface ( hardware/anchors not included) <b>Part Number: BKS XBO WM CLR</b>		Misc.	<b>Bird Spikes</b> 10' linear bird spike (4' recommended per luminaire) silicone adhesive and application tool <b>Spike Part Number: 751631</b> <b>Adhesive Part Number: 751632</b> <b>Caulk Gun Part Number: 751636</b>	
	<b>Wood Pole Bracket</b> Mounts onto wooden poles (6" minimum OD, hardware/anchors not included) <b>Part Number: BKS XBO WP CLR</b>			Replace CLR with paint finish description Replace XX with SQ for square pole or RD for round pole ( $\geq 3"$ OD) Replace * with S (Single), D180 (Double @180°), D90 (Double @90°), T90 (Triple), Q90 (Quad) Replace _ with 4 (4" square pole) or 5 (5" square pole)	

## OPTICS ROTATION



## ACCESSORIES/OPTIONS

### Integral Louver (IL) and House-Side Shield (IH)

Integral louver (IL) and half louver (IH) accessory shields available for improved backlight control without sacrificing street performance. LSI's Integral Louver (IL) and Integral House-Side Shield (IH) options deliver backlight control that significantly reduces spill light behind the poles for applications with pole locations close to adjacent properties. The design maximizes forward reflected light while reducing glare, maintaining the optical distribution selected, and most importantly eliminating light trespass. Both options rotate

Luminaire Shown with Integral Louver (IL)



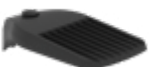
Luminaire Shown with IMSBT Option



### 7 Pin Photoelectric Control

7-pin ANSI C136.41-2013 control receptacle option available for twist lock photocontrols or wireless control modules. Control accessories sold separately. Dimming leads from the receptacle will be connected to the driver dimming leads (Consult factory for alternate wiring).

Luminaire Shown with CR7P



# ZONE Large Outdoor Sports Light

Type : \_\_\_\_\_

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## PERFORMANCE

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DELIVERED LUMENS*												
Lumen Package	Distribution	CRI	3000K CCT			4000K CCT			5000K CCT			Wattage
			Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	
50L	CT	70	50,639	135	B4-U0-G3	52,572	140	B4-U0-G3	52,497	140	B4-U0-G3	375
	CT IH		38,648	103	B3-U0-G3	40,091	107	B3-U0-G3	41,655	111	B3-U0-G3	
	CT IL		28,040	75	B2-U0-G3	29,087	78	B2-U0-G3	30,221	81	B2-U0-G3	
	FT		50,082	134	B4-U0-G5	51,952	139	B4-U0-G5	53,978	144	B4-U0-G5	
	FT IH		35,383	94	B3-U0-G5	36,704	98	B3-U0-G5	38,136	102	B3-U0-G5	
	FT IL		28,367	76	B1-U0-G4	29,426	78	B1-U0-G4	30,573	82	B1-U0-G4	
60L	CT		57,260	128	B4-U0-G3	59,445	133	B4-U0-G4	59,361	133	B4-U0-G4	448
	CT IH		43,649	97	B3-U0-G3	45,279	101	B3-U0-G4	47,045	105	B3-U0-G4	
	CT IL		31,668	71	B2-U0-G3	32,851	73	B2-U0-G3	34,132	76	B2-U0-G3	
	FT		56,949	127	B5-U0-G5	59,083	132	B5-U0-G5	60,561	135	B5-U0-G5	
	FT IH		39,961	89	B3-U0-G5	41,454	93	B3-U0-G5	43,070	96	B3-U0-G5	
	FT IL		32,038	72	B1-U0-G5	33,234	74	B1-U0-G5	34,530	77	B2-U0-G5	
65L	CT		64,952	125	B4-U0-G4	67,431	130	B4-U0-G4	67,336	130	B4-U0-G4	518
	CT IH		49,576	96	B3-U0-G4	51,427	99	B3-U0-G4	53,433	103	B3-U0-G4	
	CT IL		35,968	69	B2-U0-G3	37,311	72	B2-U0-G4	38,766	75	B2-U0-G4	
	FT		64,239	124	B5-U0-G5	66,638	129	B5-U0-G5	69,237	134	B5-U0-G5	
	FT IH		45,387	88	B3-U0-G5	47,082	91	B3-U0-G5	48,918	94	B3-U0-G5	
	FT IL		36,387	70	B2-U0-G5	37,746	73	B2-U0-G5	39,218	76	B2-U0-G5	
78L	CT	74,745	115	B4-U0-G4	77,598	120	B5-U0-G4	77,488	120	B5-U0-G4	648	
	CT IH	57,284	88	B3-U0-G4	59,423	92	B3-U0-G4	61,741	95	B3-U0-G4		
	CT IL	41,561	64	B2-U0-G4	43,113	67	B2-U0-G4	44,794	69	B2-U0-G4		
	FT	73,925	114	B5-U0-G5	76,685	118	B5-U0-G5	79,676	123	B5-U0-G5		
	FT IH	52,444	81	B3-U0-G5	54,403	84	B3-U0-G5	56,525	87	B3-U0-G5		
	FT IL	42,045	65	B2-U0-G5	43,615	67	B2-U0-G5	45,316	70	B2-U0-G5		

\*LEDs are frequently updated therefore values are nominal

ELECTRICAL DATA* (AMPS)						
Lumen Package	120V	208V	240V	277V	347V	480V
50L	3.13	1.80	1.56	1.35	1.08	0.78
60L	3.73	2.15	1.87	1.62	1.29	0.93
65L	4.32	2.49	2.16	1.87	1.49	1.08
78L	5.40	3.12	2.70	2.34	1.87	1.35

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

RECOMMENDED LUMEN MAINTENANCE <sup>10</sup>					
Ambient Temp	Lumen Multiplier				
	0 hrs. <sup>11</sup>	25K hrs. <sup>11</sup>	50K hrs. <sup>11</sup>	75K hrs. <sup>12</sup>	100K hrs. <sup>12</sup>
0 C - 40 C	100%	100%	97%	94%	92%

<sup>10</sup> Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.

<sup>11</sup> In accordance with IESNA TM-21-II, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).

<sup>12</sup> In accordance with IESNA TM-21-II, Calculated Values represent time durations that exceed six times NA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).

# ZONE Large Outdoor Sports Light

Type : \_\_\_\_\_

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## PHOTOMETRICS

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Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

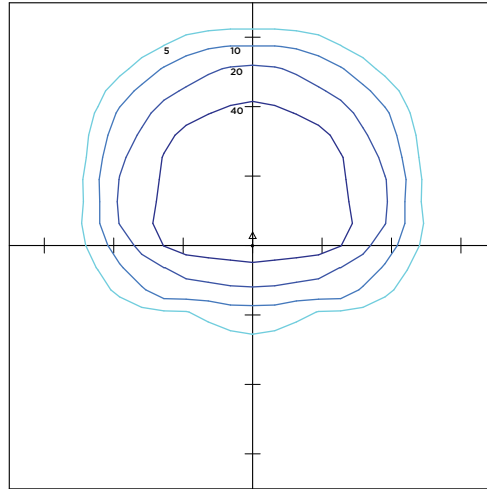
See the individual product page on <https://www.lsicorp.com/> for detailed photometric data.

### ZNL-60L-CT-40

Luminaire Data	
Type 3 Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	67,432
Watts	518
Efficacy	130
IES Type	Type III - Very Short
BUG Rating	B5-U0-G3

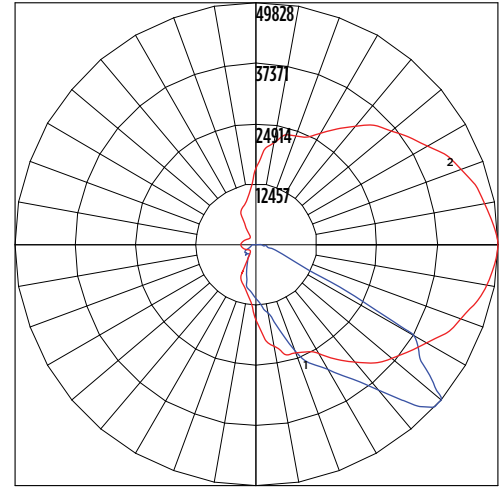
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30)°	13857	9%
Medium (30-60)°	44654	43%
High (60-80)°	8162	48%
Very High (80-90)°	779	1%
Uplight (90-180)°	0	0%
Total Flux	67432	100%

#### ISO Footcandle



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

#### Polar Curve



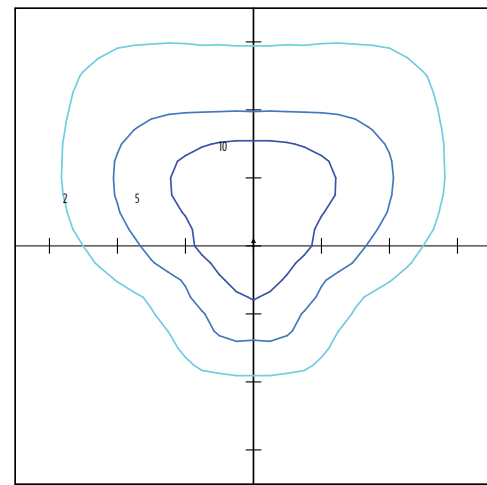
■ Vertical Plane ■ Horizontal Cone

### ZNL-65L-FT-40

Luminaire Data	
Type 3 Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	66,638
Watts	518
Efficacy	129
IES Type	Type IV - Short
BUG Rating	B5-U0-G5

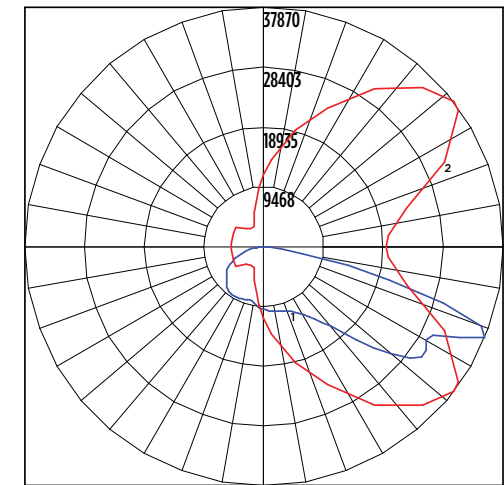
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30)°	8542	13%
Medium (30-60)°	33055	50%
High (60-80)°	23973	36%
Very High (80-90)°	1069	2%
Uplight (90-180)°	0	0%
Total Flux	66638	100%

#### ISO Footcandle



25' Mounting Height / 20' Grid Spacing  
■ 20 FC ■ 10 FC ■ 5 FC ■ 2 FC

#### Polar Curve



■ Vertical Plane ■ Horizontal Cone

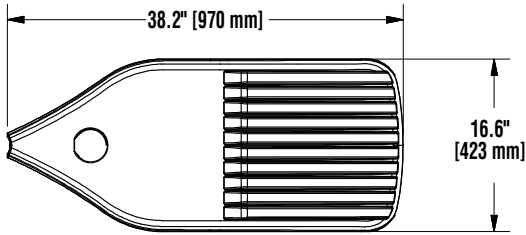
# ZONE Large Outdoor Sports Light

Type: \_\_\_\_\_







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## PRODUCT DIMENSIONS

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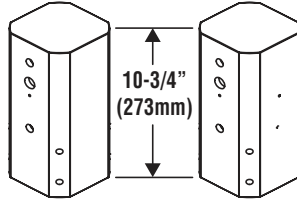


### LUMINAIRE EPA CHART - ZNL

Tilt Degree		0°	30°	45°	Tilt Degree		0°	30°	45°
	Single	0.8	2.2	2.9		T90°	2.0	3.8	4.5
	D180°	1.6	2.2	2.9		TN120°	2.0	5.0	6.0
	D90°	1.2	3.0	3.7		Q90°	2.0	3.8	4.5

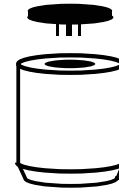
### BRACKETS

**BKA-NM-\*-CLR: Tenon Mount Fitter**



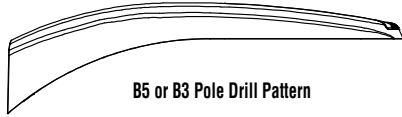
Single/D-180 (Drilled 2 Sides)      D90/T90/Q90 (Drilled 4 Sides)  
For flat surface brackets

**BRKT-4ESF-\*-CLR: Pole Top Hub**

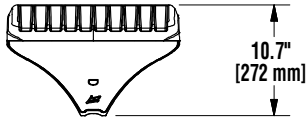
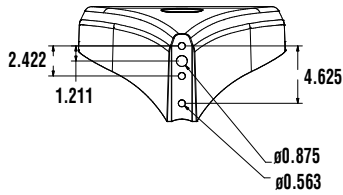


S - Single  
D180 - Double  
D70 - Double  
D90 - Double  
Q90 - Quad  
Q90 - Quad

Fits over 4" OD pole or tenon



B5 or B3 Pole Drill Pattern



# ZONE Large Outdoor Sports Light

Type : \_\_\_\_\_

 Have questions? Call us at (800) 436-7800

## CONTROLS

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

Slim low profile sensor provides multi-level control based on motion and/or daylight. Sensor controls 0-10 VDC LED drivers and is IP66 rated for cold and wet locations (-40°F to 167°F). Two unique PIR lenses are available and used based on fixture mounting height. All control parameters are adjustable via an iOS or Android App capable of storing and transmitting sensor profiles.

[Click here to learn more details about IMSBT](#)



LEVITON App



Apple



Android

### AirLink Blue (ALBMRxLR, ALBCSx)

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

[Click here to learn more details about AirLink Blue](#)



AirLink Blue App



Apple

### Sensor Sequence of Operations

Standard Programming	On Event	Off Event	On Light Level	Dim Light Level	Daylight Harvesting	Delay To Off	Sensitivity
OMSBTxL/IMSBTxL	Motion	No Motion	100%	N/A	On; Auto Calibration	20 minutes	High
OMS	Motion	No Motion	N/A	N/A	N/A	30 seconds	Auto

Operation	Description
On Event	Trigger that activates lights to turn on; either automatic via motion detected or manually activated via push of button.
Off Event	Trigger that activates lights to turn off; either automatic via no motion detected or manually activated via push of button.
On Light Level	The light level that the fixtures will turn on to when ON EVENT occurs.
Dim Light Level	The light level that the fixtures will dim down to when no motion is detected.
Delay to Dim	The amount of time after which no motion is detected that the fixtures will be triggered to dim down. This sequence is optional, and sensor can be programmed to only trigger the fixture to turn off by entering 100% in this field.
Delay to Off	The amount of time after which no motion is detected that the fixtures will be triggered to turn off. If delay to dim is part of the programmed functionality, this is the amount of time after which no motion is detected after the fixture have already dimmed down.
Sensitivity	The sensitivity can be set to high, medium, low, or auto where applicable. High will detect smaller, simple motions. Low will only detect larger more complex motions. Auto temperature calibration adjusts the PIR sensitivity as ambient temperature rises to increase detection of heat movement through the field of view.