

Catalog # :	Project :	Type :
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ZONE™ Large (ZNL)

Outdoor Sports Light















OVERVIEW						
50,000 - 78,000						
375 - 648						
114 - 146						
60 (27.2)						



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 backlight 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 idependently and can be commmissioned 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.
- IDA 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 applicationsapplicationsare qualified.
- IK08 rated luminiare 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 to confirm which versions are qualified.
- Patented Silicone Optics (US Patent NO. 10,816,165 B2)



ZONE Large Outdoor Sports Light

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

Back to Quick Links **ORDERING GUIDE**

TYPICAL ORDER EXAMPLE: ZNL 60L CT UNV 50 ALBCS1 BLK IH Distributions Output Orientation Voltage **Color Temperature** Prefix **UNV** - Universal Voltage (120-277V) **50** - 5,000 CCT **ZNL** - Zone Large **50L** - 50,000 lms CT - Court Optic (Blank) - Standard (no rotation) **60L** - 60,000 lms FT - Forward Throw L - Optics rotated left 90° **HV** - High Voltage (347-480V) **40** - 4,000 CCT 65L - 65,000 lms R - Optics rotated right 90° **30** - 3,000 CCT **78L** - 78,000 lms Custom Lumen Packages1

Controls	Finish	Options
Wireless Controls System ALSC - AirLink Synapse Control System ALSC02 - AirLink Synapse Control System with 12-20' Motion Sensor ALSC034 - AirLink Synapse Control System with 20-40' Motion Sensor ALSC UNY TL7 - Airlink Synapse Integral Controller and Dynamic Behaviors Drivers ALSC UNY TL7 - Airlink Synapse 7 Pin Twist Lock Controller 120V-277V ALSC HV TL7 - Airlink Synapse 7 Pin Twist Lock Controller 347V-480V ALSSM WIFI-VER-CEL - AirLink Synapse Central Base Station ALS RMT ACCESS - AirLink Synapse Dynamic Behavior Software ALS DYN SCENE - AirLink Synapse Dynamic Behavior Software ALBCS1 - AirLink Blue Wireless Motion & Photo Sensor Controller (8-24' mounting height) ALBCS2 - AirLink Blue Wireless Motion & Photo Sensor Controller (25-40' mounting height) Stand-Alone Controls EXT - 0-10v Dimming leads extended to housing exterior CR7P - 7 Pin Control Receptacle ANSI C136.412 IMSBT1 - Integral Bluetooth™ Motion and Photocell Sensor max 8-24' mounting height ^{3,4} IMSBT2 - Integral Bluetooth Motion and Photocell Sensor max 25-40' mounting height ^{3,4}	BLK - Black BRZ - Dark Bronze GPT - Graphite MSV - Metallic Silver PLP - Platinum Plus GRN - Green WHT - White	(Blank) - None IH - Integral Half Louver (Moderate Spill Light Cutoff IL - Integral Louver (Sharp Spill Light Cutoff) FMS - Fixed Mounting Studs ⁵



Need more information?

Click here for our glossary





Accessory Ordering Information⁶

CONTROLS ACCESSORIES ⁶	
Description	Order Number
Twist Lock Photocell (120V) for use with CR7P	122514
Twist Lock Photocell (208-277V) for use with CR7P	122515
Twist Lock Photocell (347V) for use with CR7P	122516
Twist Lock Photocell (480V) for use with CR7P	225180
Shorting Cap for use with CR7P ⁷	149328

FUSING OPTIONS ⁸					
Single Fusing (120V)					
Single Fusing (277V)					
Double Fusing (208V, 240V)	<u>See Fusing</u> <u>Accessory Guide</u>				
Double Fusing (480V)					
Double Fusing (347V)					

SHIELDING OPTIONS					
Zone Medium	See Shielding				
Zone Large	<u>Guide</u>				

Type: _____

- 1 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.
- 3 Consult facotry for 347-480V.
- 4 IMSBT is field configurable via the LSI app that can be downloaded from your smartphone's native app store.
- 5 For use with ZNL upswept arm only. Please see accessory table for ordering detials.
- 6 Accessories are shipped separately and field installed.
- Fusing must be located in hand hole of pole. See Fusing Accessory Guide for compatability.
- 8. "CLR" denotes finish. See Finish options..

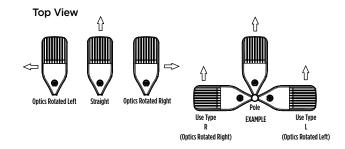
ACCESSORIES

MO	MOUNTING ACCESSORIES							
	Universal Mounting Bracket Mounts to ≥ 3" square or round (tapered/straight) poles with (2) mounting hole spaces between 3.5" to 5" Part Number: BKA UMB CLR							
Side Arm	Quick Mount Plate True one person installation to existing/new contruction poles with hole spaces beteen 2.4 to 4.6" Part Number: BKS PQM B3B5 XX CLR							
	rait numer. Dr.3 rum 6363 AA CLR							
	15° Tilt Quick Mount Plate True one person installation to existing/new contruction poles with hole spaces beteen 2.4 to 4.6"							
	Part Number: BKS PQ15 B3B5 XX CLR							
	Adjustable Slipfitter Mounts onto a 2" (51mm) IP, 2.375" (60mm) 0.D. tenon and provides 180° of tilt (max 45° above horizontal) Part Number: BKA ASF CLR							
Tenon / Slipfitter	Square Tenon Top Mounts onto a 2" (51mm) IP, 2.375" (60mm) 0.D. tenon and allows for mounting up to 4 luminaires Part Number: BKA XNM *	V						
	Square Internal Slipfitter Mounts inside 4" or 5" square pole and allows for mounting up to 4 lumianires Part Number: BKA X_ISF * CLR							
Wood Pole	Wall Mount Bracket Mounts onto vertical wall surface (hardware/anchors not included) Part Number: BKS XBO WM CLR							
Wall Mount/ Wood Pole	Wood Pole Bracket Mounts onto wooden poles (6" minimum OD, hardware/anchors not inlcuded) Part Number: BKS XBO WP CLR							

SHII	HIELDING, POLES & MISC. ACCESSORIES							
	Integral Louver Field Install Integral Louver provides maximum backlight control by shiedling each individual row of LEDS Part Number: 686485							
Shielding	Integral Half Louver Field Install Integral Half Louver provides great backlight control without impacting front side distribution. Part Number: 743416							
	External Shield External shield blocks view of light source from anyside of luminaire, additional shielding configurations available Part Number: 785970BLK (3") / 785962BLK (6")	<u>(E</u>						
	Square Poles 14 - 39' steel and aluminum poles in 4", 5" and 6" sizes for retrofit and new construction Part Number: 4SQ/5SQ/6SQ	~						
Poles	Round Poles 10 - 30' steel and aluminum poles in 4" and 5" sizes for retrofit and new construction Part Number: 4RP/SRP	~						
	Tapered Poles 20' - 39' steel and aluminum poles for retrofit and new construction Part Number: RTP							
Misc.	Bird Spikes 10' Linear Bird Spike Kit, 4' recommended per luminaire, includes silcone adhesive and application tool Part Number: 736795	AUNIMANNA						

Type: _____

OPTICS ROTATION



ACCESSORIES/OPTIONS

Replace * with S (Single), D180 (Double @180°), D90 (Double @90°), T90 (Triple), Q90 (Quad)

Repleace XX with SQ for square pole or RD for round pole (≥3" 0D)

Replace _ with 4 (4" square pole) or 5 (5" square pole)

Replace CLR with paint finish description

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 side 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

IMSRT

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).





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

PERFORMANCE Back to Quick Links

DELIVERED LU	DELIVERED LUMENS*											
		3000K CCT		4000K CCT		5000K CCT						
Lumen Package	Distribution	CRI	Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	Wattage
EQ1	СТ		50680	135	B4-U0-G3	52572	140	B4-U0-G3	54622	146	B4-U0-G3	770
50L	FT		50082	134	B4-U0-G5	51952	139	B4-U0-G5	53978	144	B4-U0-G5	375
60L	CT		57428	128	B4-U0-G3	59446	133	B4-U0-G3	60978	133	B4-U0-G3	440
OUL	FT	70	56949	127	B4-U0-G5	59083	132	B5-U0-G5	60561	135	B5-U0-G5	448
CEI	CT	70	65005	125	B4-U0-G3	67432	130	B5-U0-G3	70062	135	B5-U0-G3	Г10
65L	FT		64239	124	B5-U0-G5	66638	129	B5-U0-G5	69237	134	B5-U0-G5	518
701	СТ		74805	115	B5-U0-G3	77599	120	B5-U0-G3	80625	124	B5-U0-G3	C 40
78L	FT		73925	114	B5-U0-G5	76685	118	B5-U0-G5	79676	123	B5-U0-G5	648

^{*}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 ¹⁰					
Ambient Temp			Lumen Multiplier		
C	0 hrs. ¹¹	25K hrs. ¹¹	50K hrs. ¹¹	75K hrs. ¹²	100K hrs. ¹²
0.0 - 40.0	100%	100%	07%	0.4%	07%

Type: _____



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

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

In accordance with IESNA TM-21-11, 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).

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PHOTOMETRICS Back to Quick Links

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%.

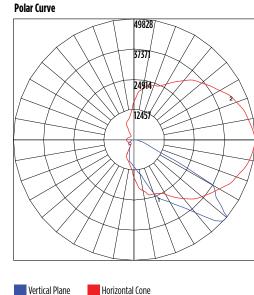
See the individual product page on https://www.lsicorp.com/ for detailed photometric data.

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)°	13837	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%

IS' Mounting Height / 10' Grid Spacing



Type: _____

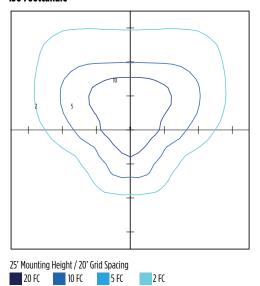
ZNL-65L-FT-40

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

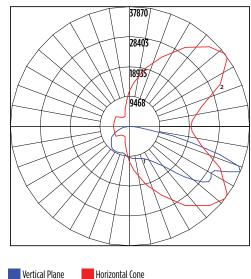
Zonal Lumen Summary						
Zone	Lumens	% Luminaire				
Low (0-30)°	8542	13%				
Medium (30-60)°	33055	50%				
High (60-80)°	23973	36%				
Very High (80-90)°	1069	2%				
Uplight (90-180)°	0	0%				
Total Flux	66638	100%				

ISO Footcandle

40 FC 20 FC 10 FC 5 FC

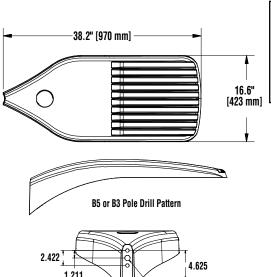


Polar Curve



PRODUCT DIMENSIONS

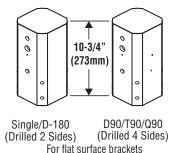
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LUMINAIRE EPA CHART - ZNL										
Tilt Degree		0 °	30°	45°	Tilt Degree		0 °	30°	45°	
-	Single	0.8	2.2	2.9		T90°	2.0	3.8	4.5	
	D180°	1.6	2.2	2.9		TN120°	2.0	5.0	6.0	
₹	D90°	1.2	3.0	3.7		Q90°	2.0	3.8	4.5	

BRACKETS

BKA-NM-*-CLR: Tenon Mount Fitter



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



S - Single D180 - Double D70 - Double D90 - Double

Type: _

090 - Double 090 - Quad 090 - Quad

Fits over 4" OD pole or tenon

CONTROLS

Integral Bluetooth™ Motion and Photocell Sensor (IMSBT)

an 875

ø0.563

10.7" [272 mm]

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

Click the link below to learn more details about IMSBT.

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

AirLink Wireless Lighting Controller (ALSC)

The AirLink integrated controller is a California Title 24 compliant lighting controller that provides real-time light monitoring and control with utility-grade power monitoring. It includes a 24V sensor input and power supply to connect a sensor into the outdoor AirLink wireless lighting system. The wireless integrated controller is compatible with this fixture. It also includes the ability to add Dynamic Behaviors and save scenes for specific sporting events.

Click the link below to learn more details about AirLink.

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

AirLink Blue (ALBCS 1 & 2)

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 the link below to learn more details about AirLink Blue.

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

