Mirada Small Area (MRS)
Turtle friendly LED Area Light

IP66 IK08

OVERVIEW

Lumen Package	2,000 - 4,000
Wattage Range	36 - 93
Efficacy Range (LPW)	39 - 73
Fixture Weight lbs (kg)	20 (9.1)

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: 27 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 2, 3, 5W, and FT.

- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93%.

- Zero uplight.

- Available in narrow band amber with peak intensity at 596nm.

- Integral louver (IL) and integral half louver (IH) options available for enhanced backlight control.

- External shielding available for blocking visibility from any side of the luminaire.

Electrical

- High-performance driver features over-voltage, 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).

- Total harmonic distortion: <20%

- Operating temperature: -40°C to +50°C (-40°F to +122°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).

- 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™ motion and photocell sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.

- LSI's AirLink™ wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7.

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.

- Utilizes LSI's traditional B3 drill pattern.

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.

- Suitable for wet locations.

- IP66 rated Luminaire per IEC 60598-1.

- 3G rated for ANSI C136.31 high vibration applications are qualified.

- IK08 rated luminaire per IEC 66262 mechanical impact code.

Mirada Small Area Light (MRS)

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ORDERING GUIDE

Type: _____

TYPICAL ORDER EXAMPLE: MRS LED 4L SIL FT L UNV DIM AMT ALBCS1 BLK IH

Prefix	Light Source	Lumen Package	Lens	Distribution	Orientation[2]	Voltage	Driver
MRS - Mirada Small Area Light	**LED**	**2L** - 2,000 lms **4L** - 4,000 lms Custom Lumen Packages[1]	**SIL** - Silicone	**2** - Type 2 **3** - Type 3 **5W** - Type 5 Wide **FT** - Forward Throw	**(blank)** - standard **L** - Optics rotated left 90º **R** - Optics rotated right 90º	**UNV** - Universal Voltage (120-277V) **HV** - High Voltage (347-480V)	**DIM** - 0-10V Dimming (0-10%)

Color Temp	Controls (Choose One)	Finish	Options
AMT - Narrow Band Amber	**(Blank)** - None **Wireless Controls System** **ALSC** - AirLink Synapse Control System **ALSCS2** - AirLink Synapse Control System with 12-20' MH Motion Sensor **ALSCS4** - AirLink Synapse Control System with 20-40' MH Motion Sensor **ALBCS1** - AirLink Blue Wireless Motion & Photo Sensor Controller (8-24' MH) **ALBCS2** - AirLink Blue Wireless Motion & Photo Sensor Controller (25-40' MH) **Stand-Alone Controls** **EXT** - 0-10v Dimming leads extended to housing exterior **CR7P** - 7 Pin Control Receptacle ANSI C136.41 [3] **IMSBTL1** - Integral Bluetooth™ Motion and Photocell Sensor (8-24' MH)[4] **IMSBTL2** - Integral Bluetooth™ Motion and Photocell Sensor (25-40' MH)[4]	**BLK –** Black **BRZ –** Dark Bronze **GMG –** Gun Metal Gray **GPT –** Graphite **MSV –** Metallic Silver **PLP –** Platinum Plus **SVG –** Satin Verde Green **WHT –** White	**(Blank)** - None **IH –** Integral Half Louver (Moderate Spill Light Cutoff)[2] **IL –** Integral Louver (Sharp Spill Light Cutoff)[2]

Need more information?
Click here for our glossary

Have additional questions?
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Accessory Ordering Information[5]

CONTROLS ACCESSORIES	
Description	**Order Number**
Twist Lock Photocell (120V) for use with CR7P	**122514**
Twist Lock Photocell (208-277) for use with CR7P	**122515**
Twist Lock Photocell (347V) for use with CR7P	**122516**
Twist Lock Photocell (480V) for use with CR7P	**1225180**
AirLink 5 Pin Twist Lock Controller	**661409**
AirLink 7 Pin Twist Lock Controller	**661410**
Shorting Cap for use with CR7P	**149328**

SHIELDING OPTIONS	
Description	**Order Number**
Mirada Small	
Mirada Medium	
Mirada Large	See Shielding Guide
Zone Medium	
Zone Large	
Slice Medium	

1. Custom lumen and wattage packages available, consult factory. Values are within industry standard tolerances but not DLC listed.
2. Not available on "Type 5W" distribution.
3. Control device or shorting cap must be ordered separately. See Accessory Ordering Information.
4. IMSBT is field configurable via the LSI app that can be downloaded from your smartphone's native app store.
5. Accessories are shipped separately and field installed.
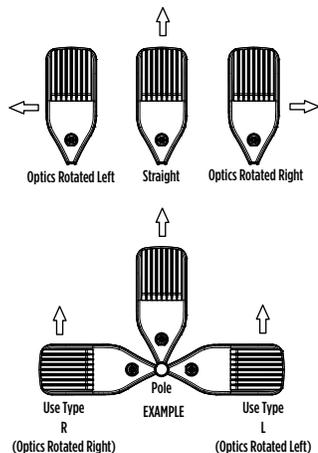6. "CLR" denotes finish. See Finish options.

ACCESSORIES

MOUNTING ACCESSORIES

Side Arm

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

Quick Mount Plate
True one person installation to existing/new construction poles with hole spaces beteen 2.4 to 4.6"
Part Number: BKS PQM B3B5 XX CLR

15° Tilt Quick Mount Plate
True one person installation to existing/new construction poles with hole spaces beteen 2.4 to 4.6"
Part Number: BKS PQ15 B3B5 XX CLR

Tenon / Slipfitter

Adjustable Slipfitter
Mounts onto a 2" (51mm) IP, 2.375" (60mm) O.D. tenon and provides 180° of tilt (max 45° above horizontal)
Part Number: BKA ASF CLR

Square Tenon Top
Mounts onto a 2" (51mm) IP, 2.375" (60mm) O.D. tenon and allows for mounting up to 4 luminaires
Part Number: BKA XNM *

Square Internal Slipfitter
Mounts inside 4" or 5" square pole and allows for mounting up to 4 lumianires
Part Number: BKA X_ISF * CLR

Wall Mount / Wood Pole

Wall Mount Bracket
Mounts onto vertical wall surface (hardware/anchors not included)
Part Number: BKS XB0 WM CLR

Wood Pole Bracket
Mounts onto wooden poles (6" minimum OD, hardware/anchors not inlcuded)
Part Number: BKS XB0 WP CLR

SHIELDING, POLES & MISC. ACCESSORIES

Shielding

Integral Louver
Field Install Integral Louver provides maximum backlight control by shiedling each individual row of LEDS
Part Number: 763445

Integral Half Louver
Field Install Integral Half Louver provides great backlight control without impacting front side distribution.
Part Number: 763446

External Shield
External shield blocks view of light source from anyside of luminaire, additional shielding configurations available
Part Number: 783607BLK (3") / 776538BLK (6")

Poles

Square Poles
14 - 39' steel and aluminum poles in 4", 5" and 6" sizes for retrofit and new construction
Part Number: 4SQ/5SQ/6SQ

Round Poles
10 - 30' steel and aluminum poles in 4" and 5" sizes for retrofit and new construction
Part Number: 4RP/5RP

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

Replace CLR with paint finish description

Repleace XX with SQ for square pole or RD for round pole (≥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

Top View

Optics Rotated Left — Straight — Optics Rotated Right

Pole

Use Type R (Optics Rotated Right)   EXAMPLE   Use Type L (Optics Rotated Left)

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 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 with the optical distribution.

Luminaire Shown with Integral Louver (IL)

Luminaire Shown with IMSBTL Option

IMSBTL

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

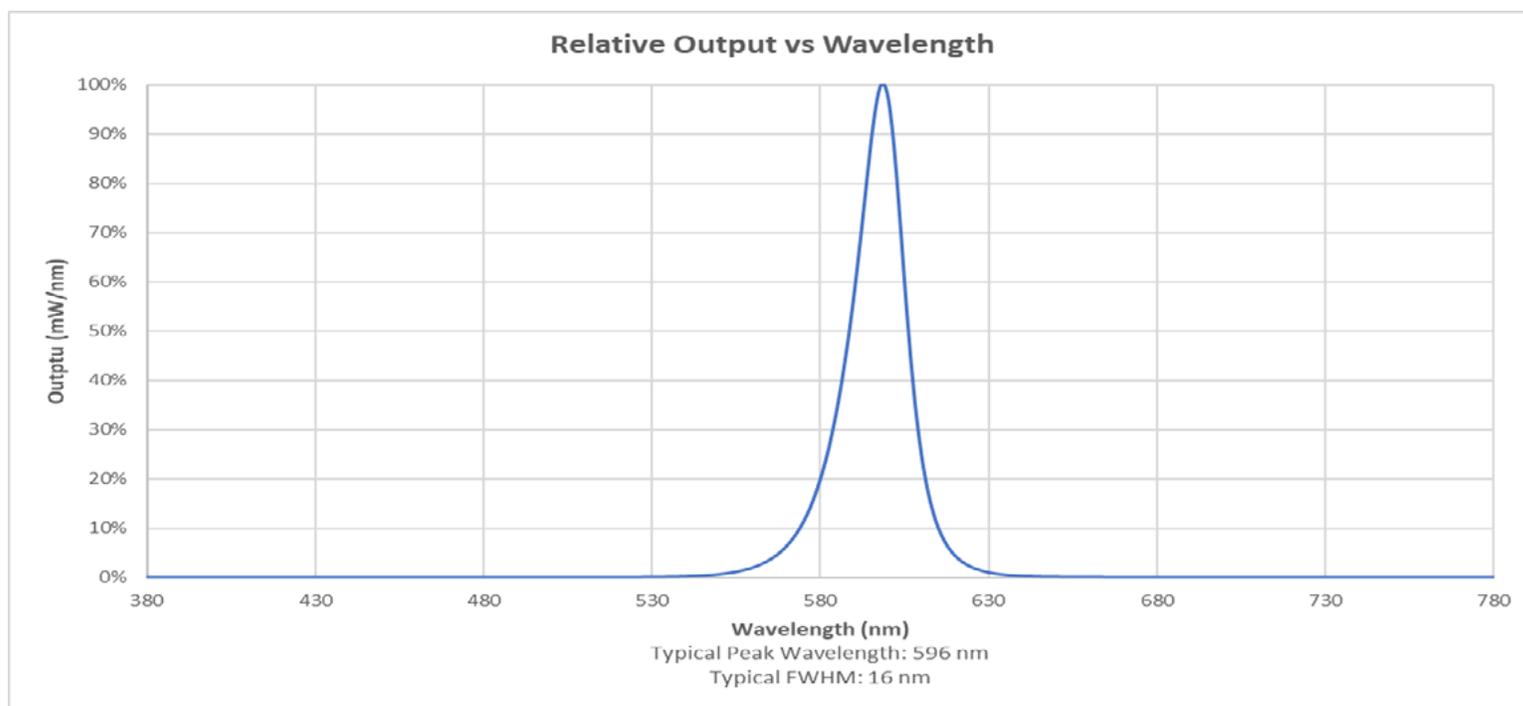# Mirada Small Area Light (MRS)

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PERFORMANCE

DELIVERED LUMENS*

Lumen Package	Distribution	Narrow Band Amber			Wattage
		Delivered Lumens	Efficacy	BUG Rating	
2L	2	2557	72	B1-U0-G1	36
	3	2599	73	B1-U0-G1	
	5W	2459	69	B2-U0-G1	
	FT	2516	70	B1-U0-G1	
4L	2	3761	40	B1-U0-G1	93
	3	3822	41	B1-U0-G1	
	5W	3616	39	B3-U0-G1	
	FT	3699	40	B1-U0-G1	

*LEDs are frequently updated therefore values are nominal.

ELECTRICAL DATA (AMPS)*

Lumens	Wattage	120V	208V	240V	277V	347V	480V
2L	36	0.30	0.17	0.15	0.13	0.10	0.07
4L	93	0.78	0.45	0.39	0.34	0.27	0.19

*Electrical data at 25ºC (77ºF). Actual wattage may differ by +/-10%

Relative Output vs Wavelength

Typical Peak Wavelength: 596 nm
Typical FWHM: 16 nm

1. Lumen maintenance values at 25ºC are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.
2. 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).
3. 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).
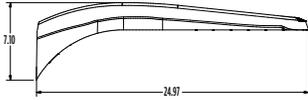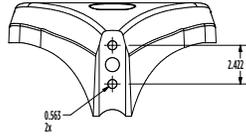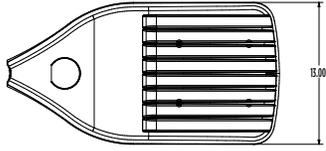
Mirada Small Area Light (MRS)

PRODUCT DIMENSIONS

Type: _____

15.00

2.422

0.563
2x

7.10

24.97

LUMINAIRE EPA CHART - MRS

Tilt Degree		0°	30°	45°	Tilt Degree		0°	30°	45°
	Single	0.5	1.3	1.8		T90°	1.4	2.3	2.6
	D180°	0.9	1.3	1.8		TN120°	1.4	1.9	2.3
	D90°	0.9	1.8	2.2		Q90°	1.4	2.3	2.6

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CONTROLS

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 (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.