Catalog # : _____ Project : _____

Prepared By : _____ Date : _____

# Mirada Small Area (MRS)

## Turtle friendly LED Area Light



| 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 luminiare per IEC 66262 mechanical impact code.



©LSI Industries Inc. All Rights Reserved. Specifications and dimensions subject to industry standard tolerances. Specifications subject to change without notice.

# Mirada Small Area Light (MRS)

Type: _____

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

## ORDERING GUIDE

Back to Quick Links

**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<br>**4L** - 4,000 lms<br>Custom Lumen Packages[1] | **SIL** - Silicone | **2** - Type 2<br>**3** - Type 3<br>**5W** - Type 5 Wide<br>**FT** - Forward Throw | **(blank)** - standard<br>**L**- Optics rotated left 90°<br>**R** - Optics rotated right 90° | **UNV** - Universal Voltage (120-277V)<br>**HV** - High Voltage (347-480V) | **DIM** - 0-10V Dimming (10-100%) |

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

**Need more information?**
Click here for our glossary

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

### 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 | See Shielding Guide |
| Mirada Medium | |
| Mirada Large | |
| 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.
7. Fusing must be located in hand hole of pole. See Fusing Accessory Guide for compatability.


©LSI Industries Inc. All Rights Reserved. Specifications and dimensions subject to industry standard tolerances. Specifications subject to change without notice.

## ACCESSORIES

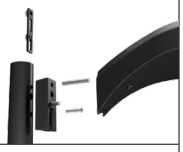
Back to Quick Links

### MOUNTING ACCESSORIES

**Side Arm**

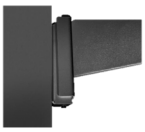
**Universal Mounting Bracket**
Mounts to ≥ 3" square or round (tapered/straight) poles with (2) mounting hole spaces between 3.5" to 5"

**Part Number: BKA UMB CLR**



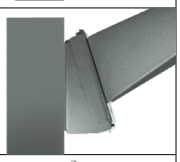
**Quick Mount Plate**
True one person installation to existing/new contruction poles with hole spaces beteen 2.4 to 4.6"

**Part Number: BKS PQM B3B5 XX CLR**



**15° Tilt Quick Mount Plate**
True one person installation to existing/new contruction 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 XBO WM CLR**



**Wood Pole Bracket**
Mounts onto wooden poles (6" minimum OD, hardware/anchors not inlcuded)

**Part Number: BKS XBO 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

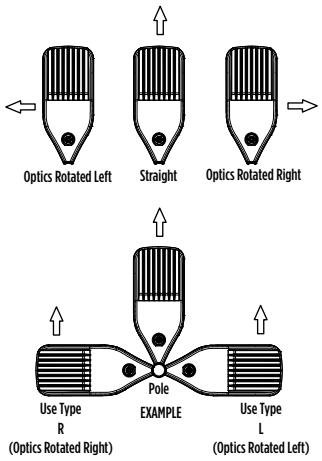
Repleace XX with SQ for square pole or RD for round pole (≥3" OD)

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




## 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




### 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





©LSI Industries Inc. All Rights Reserved. Specifications and dimensions subject to industry standard tolerances. Specifications subject to change without notice.

## PERFORMANCE

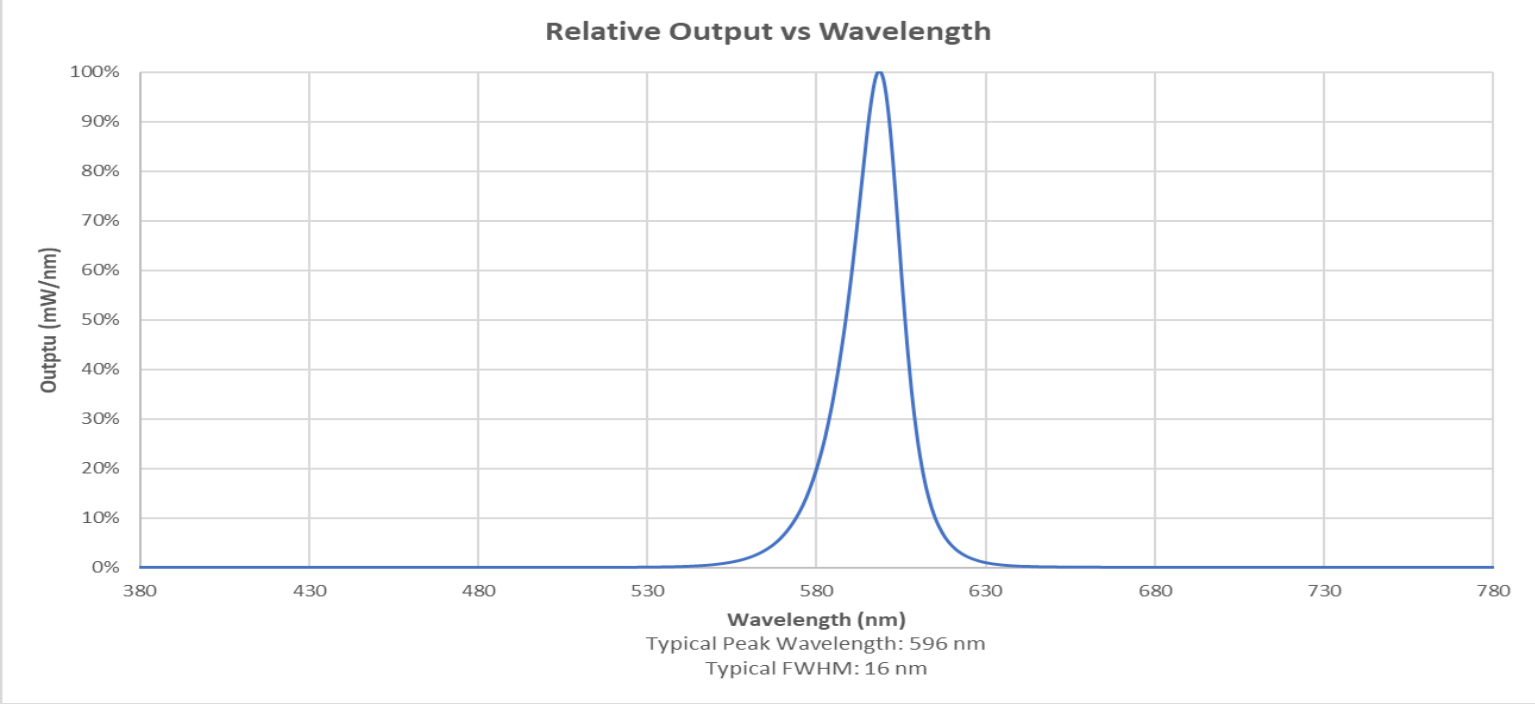
Back to Quick Links

| 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 25°C (77°F). Actual wattage may differ by +/-10%




1. Lumen maintenance values at 25°C 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).



©LSI Industries Inc. All Rights Reserved. Specifications and dimensions subject to industry standard tolerances. Specifications subject to change without notice.

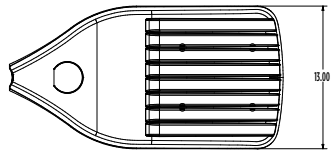
# Mirada Small Area Light (MRS)

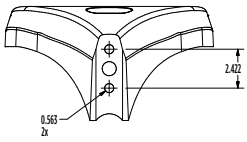
Type: _____

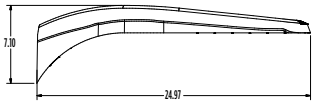
**Have questions?** Call us at (800) 436-7800

## PRODUCT DIMENSIONS

Back to Quick Links




**LUMINAIRE EPA CHART - MRS**

| Tilt Degree | | 0° | 30° | 45° |
|---|---|---|---|---|
| | Single | 0.5 | 1.3 | 1.8 |
| | D180° | 0.9 | 1.3 | 1.8 |
| | D90° | 0.9 | 1.8 | 2.2 |

| Tilt Degree | | 0° | 30° | 45° |
|---|---|---|---|---|
| | T90° | 1.4 | 2.3 | 2.6 |
| | TN120° | 1.4 | 1.9 | 2.3 |
| | Q90° | 1.4 | 2.3 | 2.6 |

## B3 Drill Pattern


©LSI Industries Inc. All Rights Reserved. Specifications and dimensions subject to industry standard tolerances. Specifications subject to change without notice.

## CONTROLS

Back to Quick Links

### 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. |



©LSI Industries Inc. All Rights Reserved. Specifications and dimensions subject to industry standard tolerances. Specifications subject to change without notice.