

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Lum. Lumens	LLF	Lum. Watts	Description
	5	X-WM4	Wall Mount	22581	0.900	196	DL150026
	5	X-WM2	Wall Mount	9462	0.900	62.5	DL153637

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
_Property Line	Illuminance	Fc	0.07	0.3	0.0	N.A.	N.A.
Bottom Parking Spots	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
Center Car Parking	Illuminance	Fc	1.15	3.1	0.0	N.A.	N.A.
Right Side Parking Spots	Illuminance	Fc	0.22	0.3	0.2	1.10	1.50
Trailer Paved Areas & Drives	Illuminance	Fc	0.77	3.4	0.0	N.A.	N.A.

- LIGHTING NOTES:**
- Mounting Height = See Drawing
 - Light Loss Factor = 0.90
 - Footcandle Values Calculated @ Grade
 - Reflectance Values - 80/50/20 (office spaces)
50/30/20 (warehouse areas)

National Lighting Vendor:
 For pricing and technical assistance contact:
 Russ Miller of CBMC INC, tel# 317-697-7510,
 rmiller@cbmcinc.com

All electrical work shall comply with National, State, and Local codes including and not limited to the National Electric Code, NFPA 101 Life Safety Code, ASHREA and /or IECC Energy Codes.

The information contained in this document is proprietary to CBMC Lighting Solutions. This document is prepared for a specific site and incorporates calculations based on data available from the client at this time. By accepting and using this document, the recipient agrees to protect its contents from further dissemination, (other than that within the organization necessary to evaluate such specification) without the written permission of CBMC Lighting Solutions. The contents of this document are not to be reproduced or copied in whole or in part without the written permission of CBMC Lighting Solutions. copyright © 2018 CBMC Lighting Solutions all rights reserved.

CBMC LIGHTING SOLUTIONS

5855 KOPETSKY DR. SUITE G. | INDIANAPOLIS, IN 46217
 317-780-8350 | WWW.CBMCINC.COM

SEE MORE

This lighting pattern represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with IESNA approved methods. Actual performance of any manufacturer's luminaire may vary due to variation in electrical voltage, tolerance in lamps and LED lumen package, location adjustments, and other variable field conditions.

Contractor to check and verify all dimensions on site before commencing any work shown.

AirWest Lot G - JRA Bldg

SITE LAYOUT

Scale:	1" = 40'	Drawing No:	LP1
Date:	1/19/23	Project No:	
Drawn By:	SJM		

CB22531-SITE



Mirada Small Area (MRS)

Outdoor LED Area Light



IP66 IK08



OVERVIEW

Lumen Package	6,000 - 24,000
Wattage Range	41 - 196
Efficacy Range (LPW)	112 - 156
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 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 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).
- L70 Calculated Life: >60k Hours
- 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).
- 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™ 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; 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 are qualified.
- IK08 rated luminaire per IEC 66262 mechanical impact code
- DesignLights Consortium® Listings in progress.



ORDERING GUIDE

[Back to Quick Links](#)

TYPICAL ORDER EXAMPLE: MRS LED 18L SIL FT UNV DIM 40 70CRI ALBCS1 BLK IH

Prefix	Light Source	Lumen Package	Lens	Distribution	Orientation ²	Voltage	Driver
MRS - Mirada Small Area Light	LED	6L - 6,000 lms 9L - 9,000 lms 12L - 12,000 lms 15L - 15,000 lms 18L - 18,000 lms 21L - 21,000 lms 24L - 24,000 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 90° R - Optics rotated right 90°	UNV - Universal Voltage (120-277V) HV - High Voltage (347-480V)	DIM - 0-10V Dimming (0-10%)

Color Temp	Color Rendering	Controls (Choose One)	Finish	Options
50 - 5,000 CCT 40 - 4,000 CCT 30 - 3,000 CCT	70CRI - 70 CRI	(Blank) - None Wireless Controls System ALS - 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 IMSBT1 - Integral Bluetooth™ Motion and Photocell Sensor (8-24' MH) ⁴ IMSBT2 - 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?
Call us at (800) 436-7800



Accessory Ordering Information⁵

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

FUSING OPTIONS ⁷	
Description	Order Number
Single Fusing (120V)	See Fusing Accessory Guide
Single Fusing (277V)	
Double Fusing (208V, 240V)	
Double Fusing (480V)	
Double Fusing (347V)	

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

- Custom lumen and wattage packages available, consult factory. Values are within industry standard tolerances but not DLC listed.
- Not available on "Type 5W" distribution.
- Control device or shorting cap must be ordered separately. See Accessory Ordering Information.
- IMSBT is field configurable via the LSI app that can be downloaded from your smartphone's native app store.
- Accessories are shipped separately and field installed.
- "CLR" denotes finish. See Finish options.
- Fusing must be located in hand hole of pole. See [Fusing Accessory Guide](#) for compatibility.

ACCESSORIES

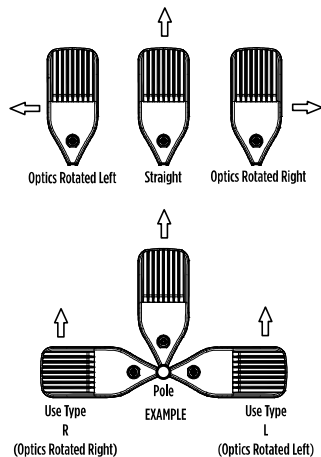
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MOUNTING ACCESSORIES		SHIELDING, POLES & MISC. ACCESSORIES		
Side Arm	Universal Mounting Bracket Mounts to $\geq 3"$ square or round (tapered/straight) poles with (2) mounting hole spaces between 3.5" to 5" Part Number: BKA UMB CLR		Integral Louver Field Install Integral Louver provides maximum backlight control by shielding each individual row of LEDs Part Number: 686485	
	Quick Mount Plate True one person installation to existing/new construction poles with hole spaces between 2.4 to 4.6" Part Number: BKS PQM B3B5 XX CLR		Integral Half Louver Field Install Integral Half Louver provides great backlight control without impacting front side distribution. Part Number: 743416	
	15° Tilt Quick Mount Plate True one person installation to existing/new construction poles with hole spaces between 2.4 to 4.6" Part Number: BKS PQ15 B3B5 XX CLR		External Shield External shield blocks view of light source from any side of luminaire, additional shielding configurations available Part Number: 785970BLK (3") / 785962BLK (6")	
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 Poles 14 - 39' steel and aluminum poles in 4", 5" and 6" sizes for retrofit and new construction Part Number: 45Q/55Q/65Q	
	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 luminaires 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		Round Poles 10 - 30' steel and aluminum poles in 4" and 5" sizes for retrofit and new construction Part Number: 4RP/SRP	
	Wood Pole Bracket Mounts onto wooden poles (6" minimum OD, hardware/anchors not included) Part Number: BKS XBO WP CLR			
			Tapered Poles 20' - 39' steel and aluminum poles for retrofit and new construction Part Number: RTP	
			Bird Spikes 10' Linear Bird Spike Kit, 4' recommended per luminaire, includes silicone adhesive and application tool Part Number: 736795	

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

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)



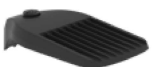
Luminaire Shown with IMSBT Option



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



Mirada Small Area Light (MRS)

Type: _____

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

PERFORMANCE

[Back to Quick Links](#)

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	
6L	2	70	6045	148	B2-U0-G1	6268	154	B2-U0-G1	6253	153	B2-U0-G1	41
	3		6145	151	B1-U0-G2	6372	156	B1-U0-G2	6357	156	B1-U0-G2	
	5W		5812	142	B3-U0-G1	6,026	148	B3-U0-G1	6012	147	B3-U0-G1	
	FT		5947	146	B1-U0-G1	6166	151	B1-U0-G1	6152	151	B1-U0-G1	
9L	2	70	9091	145	B2-U0-G2	9484	152	B2-U0-G2	9462	151	B2-U0-G2	63
	3		9241	148	B2-U0-G2	9641	154	B2-U0-G2	9619	154	B2-U0-G2	
	5W		8740	140	B3-U0-G2	9,118	146	B3-U0-G2	9097	144	B3-U0-G2	
	FT		8943	143	B2-U0-G2	9330	149	B2-U0-G2	9308	149	B2-U0-G2	
12L	2	70	12132	141	B3-U0-G2	12685	148	B3-U0-G2	12514	146	B3-U0-G2	86
	3		12333	143	B2-U0-G2	12894	150	B2-U0-G2	12721	148	B2-U0-G2	
	5W		11664	136	B4-U0-G2	12195	142	B4-U0-G2	12031	140	B4-U0-G2	
	FT		11935	139	B2-U0-G2	12479	145	B2-U0-G2	12311	143	B2-U0-G2	
15L	2	70	14220	128	B3-U0-G2	15167	137	B3-U0-G2	14488	131	B3-U0-G2	111
	3		14938	135	B2-U0-G2	15933	144	B2-U0-G2	15219	137	B2-U0-G2	
	5W		14304	129	B4-U0-G2	15257	137	B4-U0-G2	14574	131	B4-U0-G2	
	FT		14342	129	B2-U0-G2	15297	138	B2-U0-G2	14612	132	B2-U0-G2	
18L	2	70	16438	122	B3-U0-G3	17532	130	B3-U0-G3	16747	124	B3-U0-G3	135
	3		17267	128	B3-U0-G3	18417	137	B3-U0-G3	17592	131	B3-U0-G3	
	5W		16535	123	B4-U0-G2	17636	133	B5-U0-G3	16846	125	B4-U0-G2	
	FT		16578	123	B3-U0-G3	17682	131	B3-U0-G3	16890	125	B3-U0-G3	
21L	2	70	19488	118	B3-U0-G3	20786	126	B3-U0-G3	19885	120	B3-U0-G3	165
	3		20472	124	B3-U0-G3	21835	132	B3-U0-G3	20857	126	B3-U0-G3	
	5W		19604	119	B5-U0-G3	20,909	126	B5-U0-G3	19973	121	B5-U0-G3	
	FT		19655	119	B3-U0-G3	20964	127	B3-U0-G3	20025	121	B3-U0-G3	
24L	2	70	21976	112	B3-U0-G3	23439	120	B3-U0-G3	22390	114	B3-U0-G3	196
	3		23085	118	B3-U0-G3	24622	126	B3-U0-G3	23519	120	B3-U0-G3	
	5W		22105	113	B5-U0-G3	23578	120	B5-U0-G3	22522	115	B5-U0-G3	
	FT		22164	113	B3-U0-G3	23640	121	B3-U0-G3	22581	115	B3-U0-G3	

*LEDs are frequently updated therefore values are nominal.

ELECTRICAL DATA (AMPS)*						
Lumens	120V	208V	240V	277V	347V	480V
6L	0.34	0.20	0.17	0.15	0.12	0.09
9L	0.52	0.30	0.26	0.23	0.18	0.13
12L	0.72	0.41	0.36	0.31	0.25	0.18
15L	0.93	0.53	0.46	0.40	0.32	0.23
18L	1.12	0.65	0.56	0.49	0.39	0.28
21L	1.38	0.80	0.69	0.60	0.48	0.34
24L	1.63	0.94	0.82	0.71	0.56	0.41

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

RECOMMENDED LUMEN MAINTENANCE ¹					
Ambient Temp	Lumen Multiplier				
	0 hrs. ²	25K hrs. ²	50K hrs. ²	75K hrs. ³	100K hrs. ³
0 C - 25 C	100%	95%	89%	84%	79%
40 C	100%	94%	87%	80%	74%

- 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).

Mirada Small Area Light (MRS)

Type: _____

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

PHOTOMETRICS

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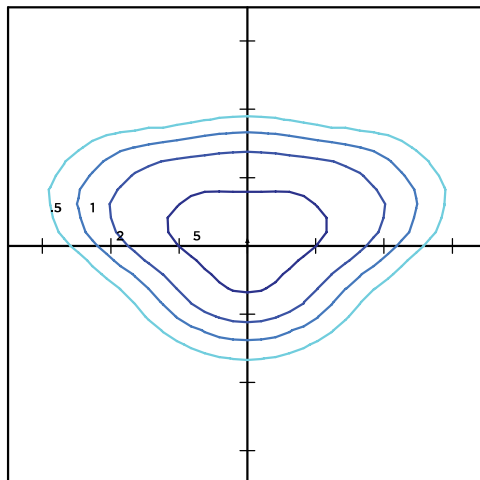
Luminaire photometry has been conducted by an accredited laboratory in accordance with IESNA LM-79. As specified by IESNA LM-79 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

MRS-LED-18L-SIL-2-40-70CRI

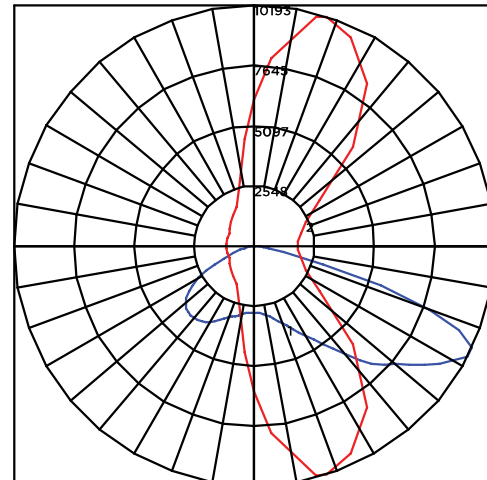
Luminaire Data	
Type 2 Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	17,532
Watts	135
Efficacy	130
IES Type	Type II - Short
BUG Rating	B3-U0-G3

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30)°	2831	16%
Medium (30-60)°	10310	59%
High (60-80)°	4208	24%
Very High (80-90)°	184	1%
Uplight (90-180)°	0	0%
Total Flux	17532	100%

ISO FOOTCANDLE



POLAR CURVE



20' Mounting Height/20' Grid Spacing

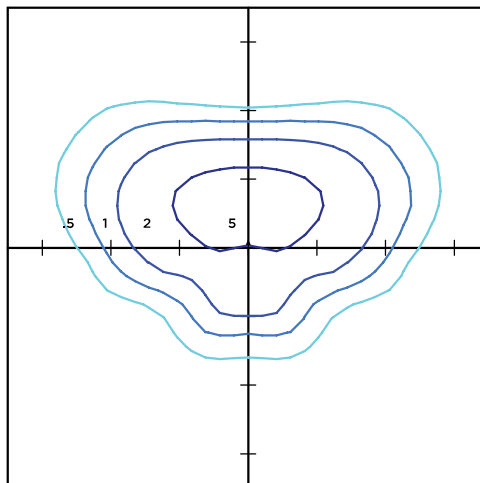
■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

MRS-LED-18L-SIL-3-40-70CRI

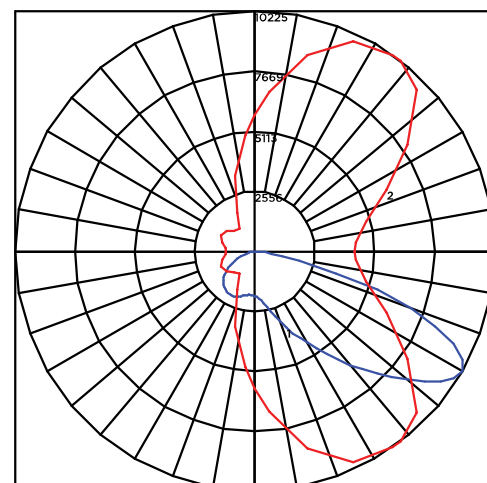
Luminaire Data	
Type 3 Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	18,417
Watts	135
Efficacy	137
IES Type	Type III - Short
BUG Rating	B3-U0-G3

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30)°	2329	13%
Medium (30-60)°	10634	61%
High (60-80)°	5246	30%
Very High (80-90)°	208	1%
Uplight (90-180)°	0	0%
Total Flux	18417	100%

ISO FOOTCANDLE



POLAR CURVE



20' Mounting Height/20' Grid Spacing

■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

Mirada Small Area Light (MRS)

Type: _____

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PHOTOMETRICS (CONT)

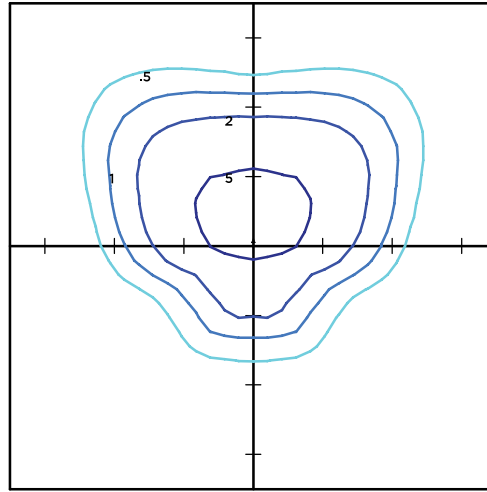
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MRS-LED-18L-SIL-FT-40-70CRI

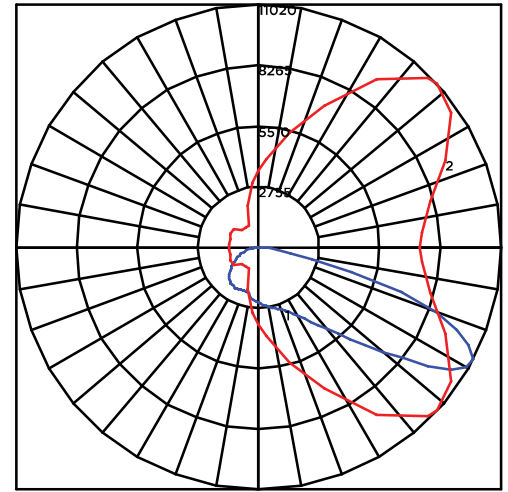
Luminaire Data	
Type FT Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	17,682
Watts	135
Efficacy	131
IES Type	Type III - Short
BUG Rating	B3-U0-G2

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30)°	2255	13%
Medium (30-60)°	9463	54%
High (60-80)°	5696	32%
Very High (80-90)°	268	2%
Uplight (90-180)°	0	0%
Total Flux	17682	100%

ISO FOOTCANDLE



POLAR CURVE



20' Mounting Height/20' Grid Spacing

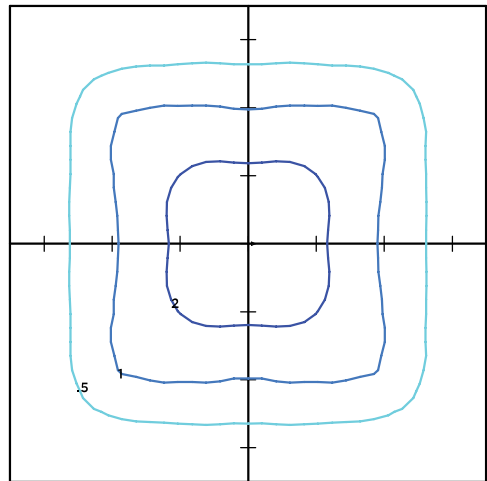
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MRM-LED-30L-SIL-5W-40-70CRI

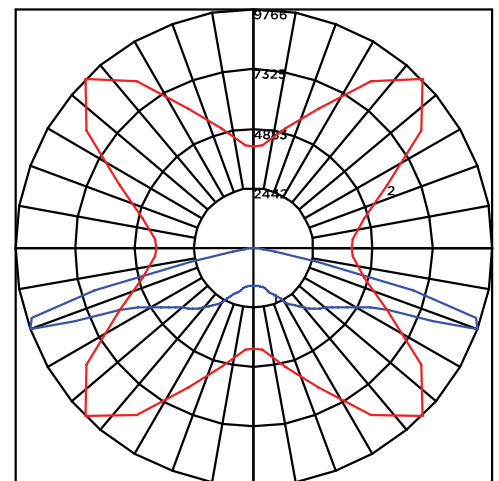
Luminaire Data	
Type 5W Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	17,636
Watts	135
Efficacy	131
IES Type	Type VS - Short
BUG Rating	B4-U0-G2

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30)°	1646	9%
Medium (30-60)°	7453	43%
High (60-80)°	8405	48%
Very High (80-90)°	132	1%
Uplight (90-180)°	0	0%
Total Flux	17636	100%

ISO FOOTCANDLE



POLAR CURVE



20' Mounting Height/20' Grid Spacing

■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

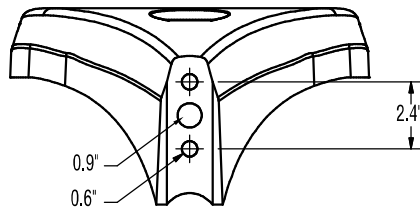
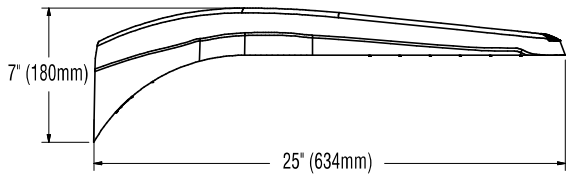
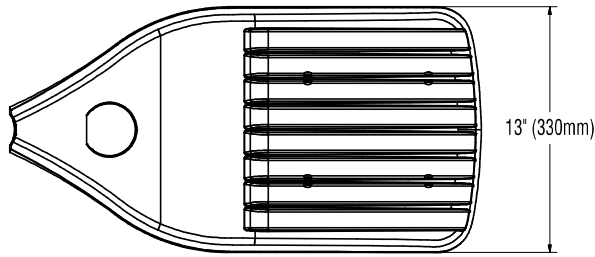
Mirada Small Area Light (MRS)

Type: _____







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PRODUCT DIMENSIONS



B3 Drill Pattern

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

CONTROLS

AirLink Wireless Lighting Controller

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.

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

Integral Bluetooth™ Motion and Photocell Sensor (IMSBT)

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 here to learn more about IMSBT.](#)

AirLink Blue

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 about AirLink Blue.](#)



Mirada Small Area (MRS)

Outdoor LED Area Light



IP66 IK08



OVERVIEW

Lumen Package	6,000 - 24,000
Wattage Range	41 - 196
Efficacy Range (LPW)	112 - 156
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 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 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).
- L70 Calculated Life: >60k Hours
- 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).
- 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™ 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; 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 are qualified.
- IK08 rated luminaire per IEC 66262 mechanical impact code
- DesignLights Consortium® Listings in progress.



ORDERING GUIDE

[Back to Quick Links](#)

TYPICAL ORDER EXAMPLE: MRS LED 18L SIL FT UNV DIM 40 70CRI ALBCS1 BLK IH

Prefix	Light Source	Lumen Package	Lens	Distribution	Orientation ²	Voltage	Driver
MRS - Mirada Small Area Light	LED	6L - 6,000 lms 9L - 9,000 lms 12L - 12,000 lms 15L - 15,000 lms 18L - 18,000 lms 21L - 21,000 lms 24L - 24,000 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 90° R - Optics rotated right 90°	UNV - Universal Voltage (120-277V) HV - High Voltage (347-480V)	DIM - 0-10V Dimming (0-10%)

Color Temp	Color Rendering	Controls (Choose One)	Finish	Options
50 - 5,000 CCT 40 - 4,000 CCT 30 - 3,000 CCT	70CRI - 70 CRI	(Blank) - None Wireless Controls System ALS - 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 IMSBT1 - Integral Bluetooth™ Motion and Photocell Sensor (8-24' MH) ⁴ IMSBT2 - 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?
Call us at (800) 436-7800



Accessory Ordering Information⁵

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

FUSING OPTIONS ⁷	
Description	Order Number
Single Fusing (120V)	See Fusing Accessory Guide
Single Fusing (277V)	
Double Fusing (208V, 240V)	
Double Fusing (480V)	
Double Fusing (347V)	

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

- Custom lumen and wattage packages available, consult factory. Values are within industry standard tolerances but not DLC listed.
- Not available on "Type 5W" distribution.
- Control device or shorting cap must be ordered separately. See Accessory Ordering Information.
- IMSBT is field configurable via the LSI app that can be downloaded from your smartphone's native app store.
- Accessories are shipped separately and field installed.
- "CLR" denotes finish. See Finish options.
- Fusing must be located in hand hole of pole. See [Fusing Accessory Guide](#) for compatibility.

ACCESSORIES

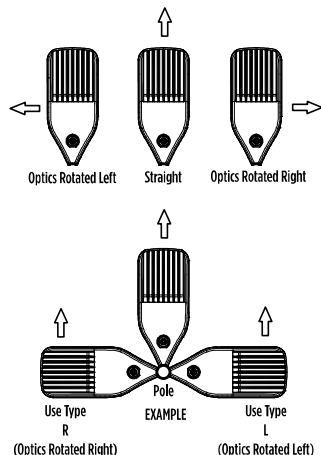
[Back to Quick Links](#)

MOUNTING ACCESSORIES		SHIELDING, POLES & MISC. ACCESSORIES		
Side Arm	Universal Mounting Bracket Mounts to $\geq 3"$ square or round (tapered/straight) poles with (2) mounting hole spaces between 3.5" to 5" Part Number: BKA UMB CLR		Integral Louver Field Install Integral Louver provides maximum backlight control by shielding each individual row of LEDs Part Number: 686485	
	Quick Mount Plate True one person installation to existing/new construction poles with hole spaces between 2.4 to 4.6" Part Number: BKS PQM B3B5 XX CLR		Integral Half Louver Field Install Integral Half Louver provides great backlight control without impacting front side distribution. Part Number: 743416	
	15° Tilt Quick Mount Plate True one person installation to existing/new construction poles with hole spaces between 2.4 to 4.6" Part Number: BKS PQ15 B3B5 XX CLR		External Shield External shield blocks view of light source from any side of luminaire, additional shielding configurations available Part Number: 785970BLK (3") / 785962BLK (6")	
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 Poles 14 - 39' steel and aluminum poles in 4", 5" and 6" sizes for retrofit and new construction Part Number: 45Q/55Q/65Q	
	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 luminaires 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		Round Poles 10 - 30' steel and aluminum poles in 4" and 5" sizes for retrofit and new construction Part Number: 4RP/SRP	
	Wood Pole Bracket Mounts onto wooden poles (6" minimum OD, hardware/anchors not included) Part Number: BKS XBO WP CLR			
			Tapered Poles 20' - 39' steel and aluminum poles for retrofit and new construction Part Number: RTP	
			Bird Spikes 10' Linear Bird Spike Kit, 4' recommended per luminaire, includes silicone adhesive and application tool Part Number: 736795	

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

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)



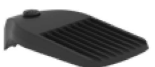
Luminaire Shown with IMSBT Option



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



Mirada Small Area Light (MRS)

Type: _____

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

PERFORMANCE

[Back to Quick Links](#)

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	
6L	2	70	6045	148	B2-U0-G1	6268	154	B2-U0-G1	6253	153	B2-U0-G1	41
	3		6145	151	B1-U0-G2	6372	156	B1-U0-G2	6357	156	B1-U0-G2	
	5W		5812	142	B3-U0-G1	6,026	148	B3-U0-G1	6012	147	B3-U0-G1	
	FT		5947	146	B1-U0-G1	6166	151	B1-U0-G1	6152	151	B1-U0-G1	
9L	2	70	9091	145	B2-U0-G2	9484	152	B2-U0-G2	9462	151	B2-U0-G2	63
	3		9241	148	B2-U0-G2	9641	154	B2-U0-G2	9619	154	B2-U0-G2	
	5W		8740	140	B3-U0-G2	9,118	146	B3-U0-G2	9097	144	B3-U0-G2	
	FT		8943	143	B2-U0-G2	9330	149	B2-U0-G2	9308	149	B2-U0-G2	
12L	2	70	12132	141	B3-U0-G2	12685	148	B3-U0-G2	12514	146	B3-U0-G2	86
	3		12333	143	B2-U0-G2	12894	150	B2-U0-G2	12721	148	B2-U0-G2	
	5W		11664	136	B4-U0-G2	12195	142	B4-U0-G2	12031	140	B4-U0-G2	
	FT		11935	139	B2-U0-G2	12479	145	B2-U0-G2	12311	143	B2-U0-G2	
15L	2	70	14220	128	B3-U0-G2	15167	137	B3-U0-G2	14488	131	B3-U0-G2	111
	3		14938	135	B2-U0-G2	15933	144	B2-U0-G2	15219	137	B2-U0-G2	
	5W		14304	129	B4-U0-G2	15257	137	B4-U0-G2	14574	131	B4-U0-G2	
	FT		14342	129	B2-U0-G2	15297	138	B2-U0-G2	14612	132	B2-U0-G2	
18L	2	70	16438	122	B3-U0-G3	17532	130	B3-U0-G3	16747	124	B3-U0-G3	135
	3		17267	128	B3-U0-G3	18417	137	B3-U0-G3	17592	131	B3-U0-G3	
	5W		16535	123	B4-U0-G2	17636	133	B5-U0-G3	16846	125	B4-U0-G2	
	FT		16578	123	B3-U0-G3	17682	131	B3-U0-G3	16890	125	B3-U0-G3	
21L	2	70	19488	118	B3-U0-G3	20786	126	B3-U0-G3	19885	120	B3-U0-G3	165
	3		20472	124	B3-U0-G3	21835	132	B3-U0-G3	20857	126	B3-U0-G3	
	5W		19604	119	B5-U0-G3	20,909	126	B5-U0-G3	19973	121	B5-U0-G3	
	FT		19655	119	B3-U0-G3	20964	127	B3-U0-G3	20025	121	B3-U0-G3	
24L	2	70	21976	112	B3-U0-G3	23439	120	B3-U0-G3	22390	114	B3-U0-G3	196
	3		23085	118	B3-U0-G3	24622	126	B3-U0-G3	23519	120	B3-U0-G3	
	5W		22105	113	B5-U0-G3	23578	120	B5-U0-G3	22522	115	B5-U0-G3	
	FT		22164	113	B3-U0-G3	23640	121	B3-U0-G3	22581	115	B3-U0-G3	

*LEDs are frequently updated therefore values are nominal.

ELECTRICAL DATA (AMPS)*						
Lumens	120V	208V	240V	277V	347V	480V
6L	0.34	0.20	0.17	0.15	0.12	0.09
9L	0.52	0.30	0.26	0.23	0.18	0.13
12L	0.72	0.41	0.36	0.31	0.25	0.18
15L	0.93	0.53	0.46	0.40	0.32	0.23
18L	1.12	0.65	0.56	0.49	0.39	0.28
21L	1.38	0.80	0.69	0.60	0.48	0.34
24L	1.63	0.94	0.82	0.71	0.56	0.41

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

RECOMMENDED LUMEN MAINTENANCE ¹					
Ambient Temp	Lumen Multiplier				
	0 hrs. ²	25K hrs. ²	50K hrs. ²	75K hrs. ³	100K hrs. ³
0 C - 25 C	100%	95%	89%	84%	79%
40 C	100%	94%	87%	80%	74%

- 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).

Mirada Small Area Light (MRS)

Type: _____

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

PHOTOMETRICS

[Back to Quick Links](#)

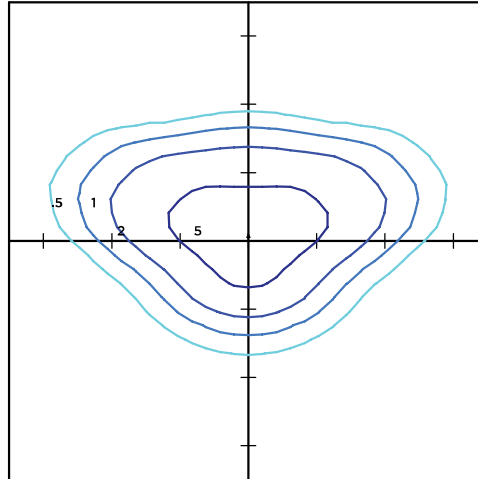
Luminaire photometry has been conducted by an accredited laboratory in accordance with IESNA LM-79. As specified by IESNA LM-79 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

MRS-LED-18L-SIL-2-40-70CRI

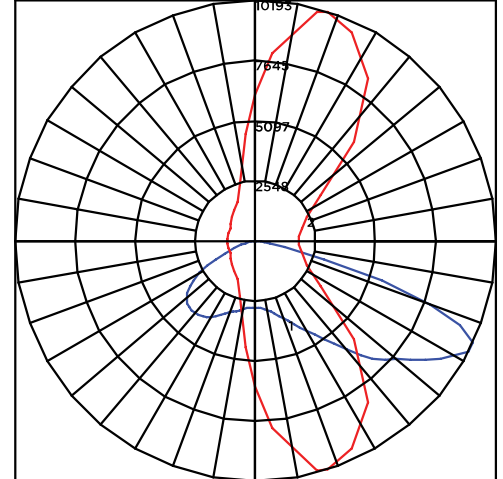
Luminaire Data	
Type 2 Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	17,532
Watts	135
Efficacy	130
IES Type	Type II - Short
BUG Rating	B3-U0-G3

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30)°	2831	16%
Medium (30-60)°	10310	59%
High (60-80)°	4208	24%
Very High (80-90)°	184	1%
Uplight (90-180)°	0	0%
Total Flux	17532	100%

ISO FOOTCANDLE



POLAR CURVE



20' Mounting Height/20' Grid Spacing

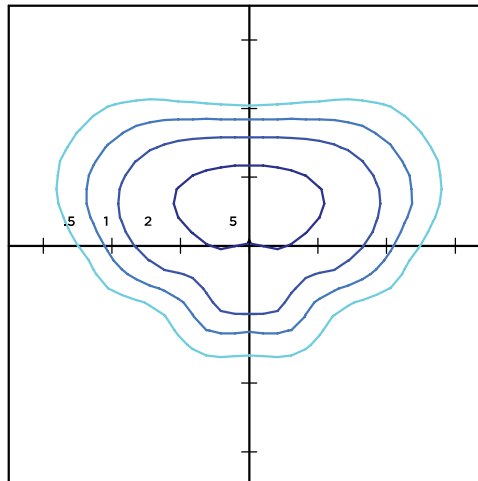
■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

MRS-LED-18L-SIL-3-40-70CRI

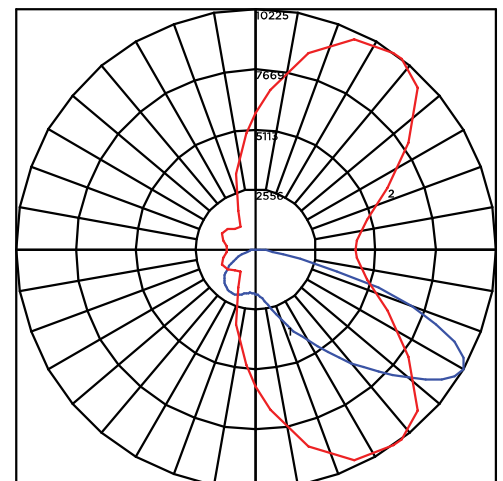
Luminaire Data	
Type 3 Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	18,417
Watts	135
Efficacy	137
IES Type	Type III - Short
BUG Rating	B3-U0-G3

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30)°	2329	13%
Medium (30-60)°	10634	61%
High (60-80)°	5246	30%
Very High (80-90)°	208	1%
Uplight (90-180)°	0	0%
Total Flux	18417	100%

ISO FOOTCANDLE



POLAR CURVE



20' Mounting Height/20' Grid Spacing

■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

Mirada Small Area Light (MRS)

Type: _____

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

PHOTOMETRICS (CONT)

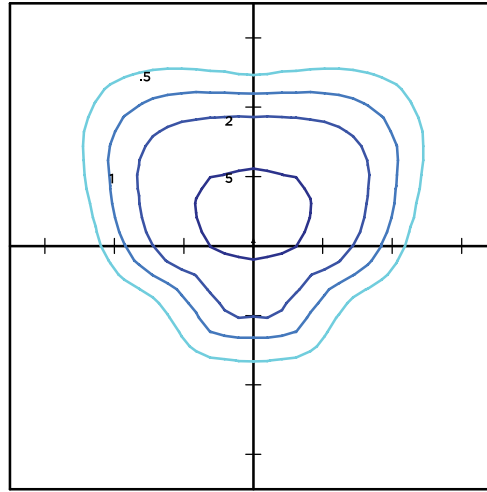
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MRS-LED-18L-SIL-FT-40-70CRI

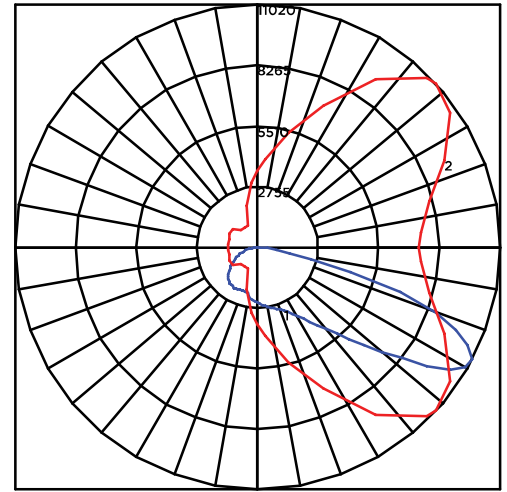
Luminaire Data	
Type FT Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	17,682
Watts	135
Efficacy	131
IES Type	Type III - Short
BUG Rating	B3-U0-G2

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30)°	2255	13%
Medium (30-60)°	9463	54%
High (60-80)°	5696	32%
Very High (80-90)°	268	2%
Uplight (90-180)°	0	0%
Total Flux	17682	100%

ISO FOOTCANDLE



POLAR CURVE



20' Mounting Height/20' Grid Spacing

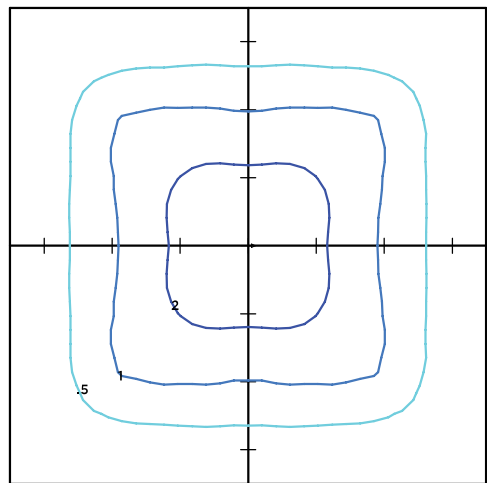
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MRM-LED-30L-SIL-5W-40-70CRI

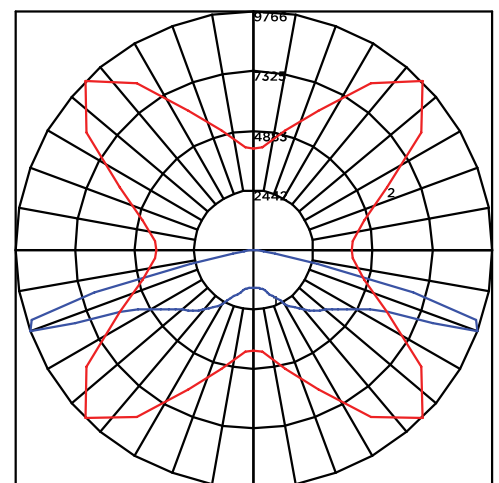
Luminaire Data	
Type 5W Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	17,636
Watts	135
Efficacy	131
IES Type	Type VS - Short
BUG Rating	B4-U0-G2

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30)°	1646	9%
Medium (30-60)°	7453	43%
High (60-80)°	8405	48%
Very High (80-90)°	132	1%
Uplight (90-180)°	0	0%
Total Flux	17636	100%

ISO FOOTCANDLE



POLAR CURVE



20' Mounting Height/20' Grid Spacing

■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

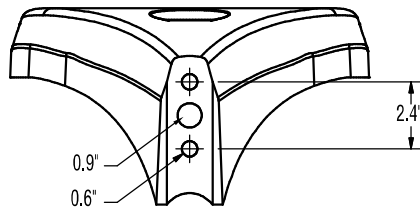
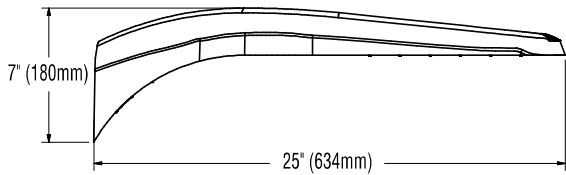
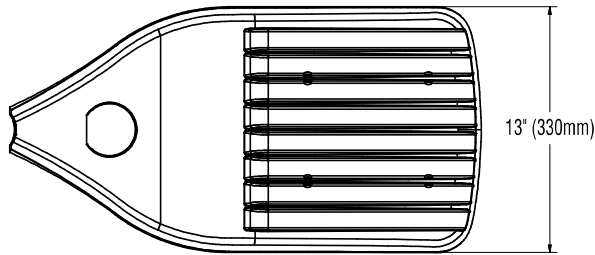
Mirada Small Area Light (MRS)

Type: _____







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PRODUCT DIMENSIONS



B3 Drill Pattern

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

CONTROLS

AirLink Wireless Lighting Controller

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.

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

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