

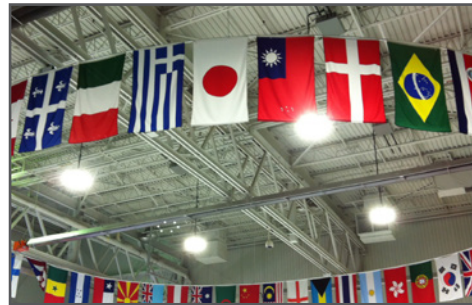
bridgelux®

OUTDOOR LIGHTING MODULE

The LED Replacement for the
High Pressure Sodium Lamp

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BRIDGELUX OLM ADVANTAGE

**3-6
Months**

Time saved
in Go To
Market

- › Reduced design and development timeline
- › Leveraged design across multiple product lines
- › IP rated component integration of optics, LED and electronic connection

\$100K

R&D Savings

- › Optic and MCPCB tooled
- › Design overhead drastically reduced
- › Leveraged luminaire housings across multiple market segments

**10-
20%**

Cost Savings

- › Direct heat sink mounting
- › No additional MCPCB required
- › Integrated environmental protection

**5-7
Days**

Manufacturing
Time Savings

- › No reflow required
- › PCB assembly eliminated
- › Integrated IP sealing system

Zero

Unnecessary
SKUs

- › Optical pattern flexibility
- › Color and CRI options
- › Standardized electronic inputs

3/5

Reduced
Thermal
Resistance

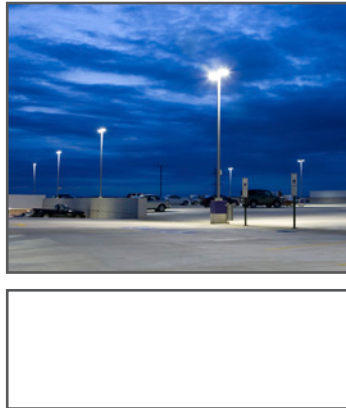
- › Direct mounting of LED array to heatsink
- › Improved system reliability and robustness
- › Heatsink size and cost reduced

OLM FEATURES

- › Integrated symmetric and asymmetric optics
- › Optimized lumen levels
- › IP66 rated
- › Innovative design
- › Component integration

OLM BENEFITS

- › Leveraged optics design and integration
- › Direct replacement for incumbent lighting sources
- › Ready for outdoor installation in the harshest environments
- › Optimized for low cost luminaire design for a competitive market
- › Drastically reduced design efforts allowing for rapid time to market



BRIDGELUX OLM SOLUTIONS

	Nominal CCT	CRI	Drive Current ^[5]	Typical Pulsed Flux ^[1] T _j = 25°C	Typical Flux ^[2,3,4] T _c = 70°C	Typical Vf ^[5]	Typical Power	Typical Efficacy T _j = 70°C
OLMA-40E000-xxxx-xx0000	4000K	80	350 mA	2162 lm	2086 lm	53.4 V	18.7 W	112 lm/W
			500 mA	2965 lm	2853 lm	55.4 V	27.7 W	103 lm/W
			700 mA	4008 lm	3845 lm	57.2 V	40.4 W	96 lm/W
OLMA-50C000-xxxx-xx0000	5000K	70	350 mA	2402 lm	2318 lm	53.4 V	18.7 W	124 lm/W
			500 mA	3294 lm	3170 lm	55.4 V	27.7 W	114 lm/W
			700 mA	4453 lm	4272 lm	57.2 V	40.4 W	106 lm/W

1. Parts are tested in pulsed conditions at the 350mA drive current, T_j = 25°C. Pulse width is 10 ms.

2. Typical performance when driven under DC (direct current) at test current with LED array case temperature maintained at 70°C, mounted to heat sink with thermal interface material.

Based on Bridgelux test setup, values may vary depending on the thermal design of the luminaire and/or the exposed environment to which the product is subjected.

3. Bridgelux maintains a ± 7% tolerance on flux measurements.

4. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.

5. Bridgelux maintains a tester tolerance of ± 0.10 V on forward voltage measurements.

	70W HPS	OLM	150W HPS	OLM	250W HPS	OLM
CCT/CRI	2100K/45CRI	5000K/70CRI	2100K/45CRI	5000K/70CRI	2100K/45CRI	5000K/70CRI
Lifetime ^[1]	24,000 hrs	70,000 hrs	24,000 hrs	70,000 hrs	24,000 hrs	70,000 hrs
Quantity	1	1	1	2	1	3
Electrical Input	AC	700mA	AC	700mA	AC	700mA
Optical Solutions	Available	Included	Available	Included	Available	Included
Typical DC Flux T _{case} 70°C	7000 lm	4272 lm	15000 lm	8544 lm	25000 lm	12816 lm
Power T _j 25°C	87 W	40.4 W	176 W	80.8 W	295 W	121.2 W
Light Source Efficacy T _c 70°C	80 lm/W	106 lm/W	85 lm/W	106 lm/W	85 lm/W	106 lm/W
System Efficacy ^[3]	32 lm/W	95 lm/W	34 lm/W	95 lm/W	34 lm/W	95 lm/W

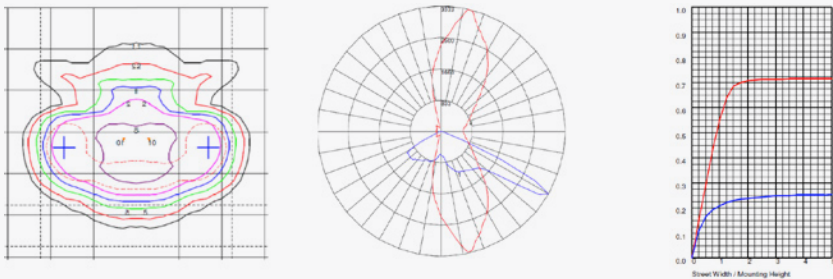
1. Based on LM80 data and TM-21 Calculations; T_{case} 70°C

2. LED equivalence to HPS based on roadway simulations

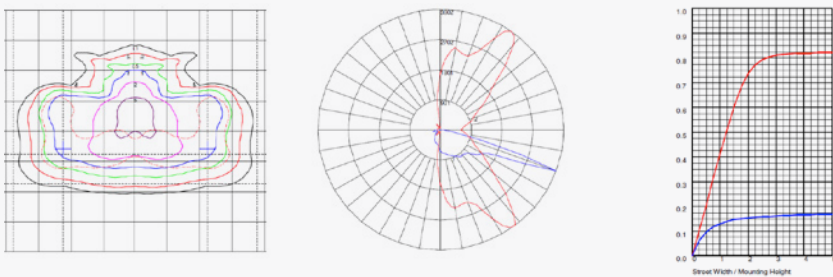
3. 10% Electrical Loss



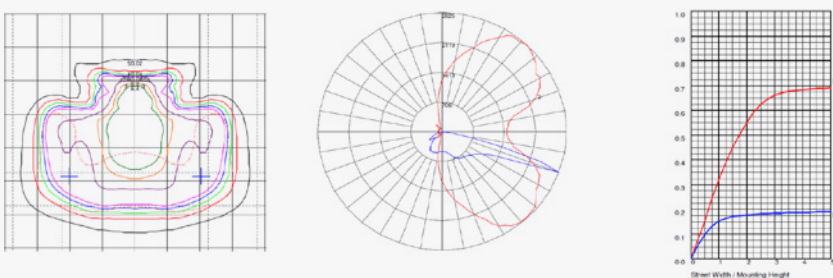
PHOTOMETRIC PERFORMANCE (OPTICAL CODE: A01A)



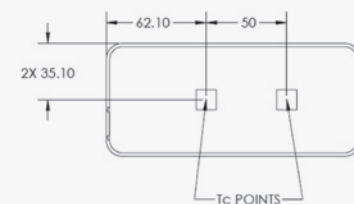
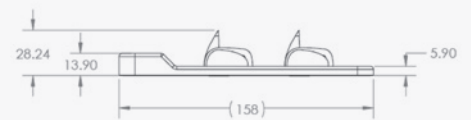
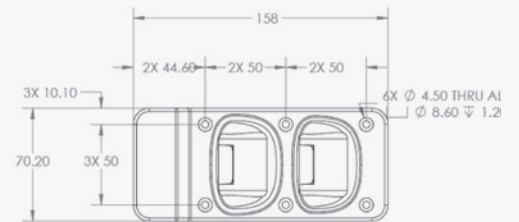
PHOTOMETRIC PERFORMANCE (OPTICAL CODE: A02A)



PHOTOMETRIC PERFORMANCE (OPTICAL CODE: A03A)



MECHANICAL DIMENSIONS



NOTES

1. Mounting holes (6X) accommodate M4 or #8 screws.
2. Bridgelux recommends six tapped holes for mounting screws with 50.0 ± 0.10 mm center-to-center spacing.
3. Screws with flat shoulders (pan, dome, button, round, truss, mushroom) provide optimal torque control. DO NOT use flat, countersink, or raised head screws.
4. Drawing dimensions are in millimeters.
5. Unless otherwise specified, tolerances are ± 0.10 mm.
6. Refer to Application Notes AN30 and AN51 for product handling, mounting and heat sink recommendations.



INDUSTRIAL

Manufacturing facilities, warehouses and large retail stores require even illumination with strong vertical shelf lighting. The asymmetric optics of Outdoor Lighting Module (OLM) offer strong vertical illumination for product displays and storage while creating ideal pathway lighting levels.

AREA LIGHTING/PARKING LOT

Driven by pedestrian safety and usage, Area and Parking Lot lights require high lumen fixtures, superior uniformity and energy savings. Bridgelux LED chip on board technology enables low cost integration of industry leading solid state lighting sources and optics.

ROADWAY

With the objective of maximizing vehicle and pedestrian safety, modern streetlights require high lumen sources with complex asymmetric optic to deliver lighting levels required by professional bodies. The unique Bridgelux LED Array and OLM Series directly address these requirements allowing for increased performance and reduced integration costs.

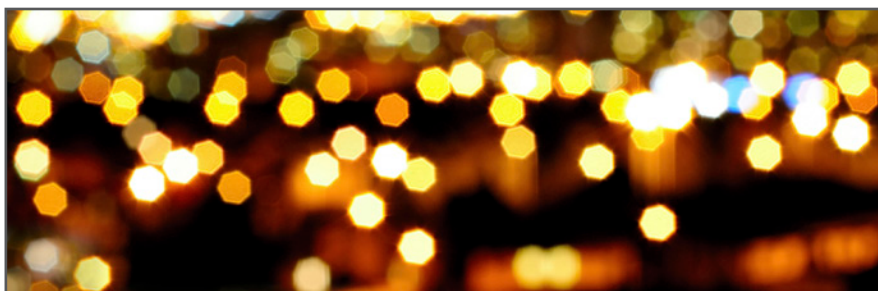
FLOOD LIGHT/WALL PACK

Broad area lighting designed to illuminate a large space, flood lights and wall packs require robust and rugged lighting components while still being compact. Bridgelux OLM slim profile and impact rated optics create an ideal platform for designing these outdoor luminaires.

FOCUSED ON THE FUTURE

Bridgelux is a recognized leader in solid state lighting solutions. As a company founded in Silicon Valley, Bridgelux invests heavily in its core technology and is committed to delivering value to customers through technology innovations. Bridgelux was the first to develop a commercially-viable LED Array, the first to introduce an LED Array optimized for customers' supply chain, and continues to pioneer the first suite of products featuring GaN-Si technology, the greatest cost reduction opportunity seen in the LED industry thus far.

Bridgelux understands that the promise of LEDs extends beyond the energy savings over current technology. Through the integration of controls and color tuning in the next generations of products, Bridgelux is expanding what is possible with light and the world's relationship with light. With a keen eye on the future and a focus on end application, Bridgelux has designed future-enabling SSL platforms with world-class quality and performance for all of your lighting needs.



For additional resources,
please visit us at www.bridgelux.com.

Case Studies

Discover how Bridgelux has helped implement visions across the globe.

Design Examples

Explore a comprehensive archive of best practice tips for both lamps and luminaires.

Product Selector Tool

Identify the ideal part for your design needs.

Ecosystem Partners

Select from an extensive list of compatible off-the-shelf system components.



Global contact information is available at:
<http://www.bridgelux.com/contact-us/>

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