



LED AREA LIGHT & LED FLOOD LIGHT FIXTURES

**BEST PRACTICES, OPTIONS,
UTILITY REBATES AND MORE!**



Best Practices For Modern LED

- Area Light Fixtures



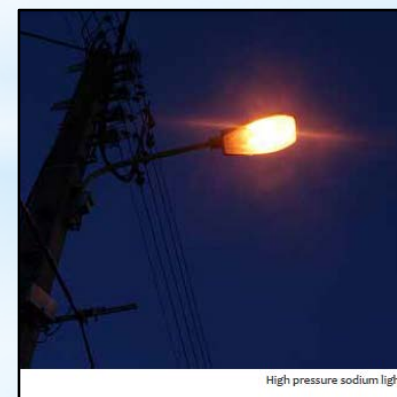
- Flood Light Fixtures



Quick History & Milestones In Area Lighting

Milestones in Public Area Lighting:

- Early 15th century, lanterns filled with tallow, wax, pitch or fat installed on London's streets
- 1667, the “Sun King”, Louis XIV, has 2,700 lanterns installed in the streets of Paris
- 1762, New York installs wooden public lamp posts with whale oil lamps
- 1792, gas lighting invented in Britain
- 1807, gas first used to light the Pall Mall section of London
- 1816, first chartered gas company founded in Baltimore in 1816, followed by Boston and New York City
- 1816, whale oil street lights installed in Pittsburgh
- 1880, Wabash, IN, the first city to be lit solely by electricity, with the “Brush Light” featuring four 3,000 candlepower open arc lamps
- 1880s, electric street lighting system installed in Pittsburgh using incandescent bulbs
- 1948, mercury vapor (MV) street light invented
- 1957, the popular high-mast ‘cobra head’ fixture is unveiled
- 1970, high pressure sodium (HPS) introduced



Advantages of using LED

- **Lower operating costs: energy efficiency**

LEDs use 50 to 90 percent less energy than other light sources while maintaining the same light output.

- **Lower operating costs: longer life**

LEDs have two to three times longer life than conventional light sources (except induction). Estimates vary because the technology is new and constantly improving, but it is commonly reported that LEDs can last 20 to 30 years depending on the quality of the product, power usage, and other factors. However, the practical LED life expectancy for street lighting application is typically estimated at 10 years, when a 30% lumen deterioration is anticipated. The reduced re-lamping costs of long-lived LEDs is a contributing factor to the lower maintenance cost of LEDs. A longer life also means less landfill waste.

- **No toxic metals or chemicals**

One of the pitfalls of other street lighting sources, including those that are more energy efficient, is that they contain mercury, lead, and other toxic chemicals. While a single bulb may not pose a serious contamination threat, the cumulative effect of the estimated 500 million street lights in use worldwide finding their way into landfills on a three to five year cycle poses an enormous pollution problem. As LEDs do not contain hazardous waste, they can be completely recycled.



Advantages of using LED

- **Monochromatic light**

LEDs emit nearly monochromatic light, making them highly efficient for colored light applications. As a result, LEDs can produce a full spectrum of color for celebratory and aesthetic purposes.

- **No burn out**

Rather than burning out, LEDs gradually dim over time. LEDs are measured on the L70 standard, which indicates the average hours of operation until the light output (lumens) deteriorates to 70 percent of its original quantity.

- **Near instant-on and rapid cycling**

LED lights achieve 100 percent brightness nearly instantly when activated. They are also unaffected by repeatedly being turned on and off (rapid cycling), unlike traditional lighting technologies which have a shorter lifespan and higher energy needs.

- **Good performance in the cold**

In colder temperatures, LED lights perform more efficiently and last longer.

- **LEED ND point contribution**

The Leadership in Energy and Environmental Design for Neighborhood Development's (LEED ND) Green Infrastructure and Buildings (GIB) category includes a credit for Infrastructure Energy



Mercury?

~40 million MH lamps in US
(1-100 mg of Mercury per Lamp)

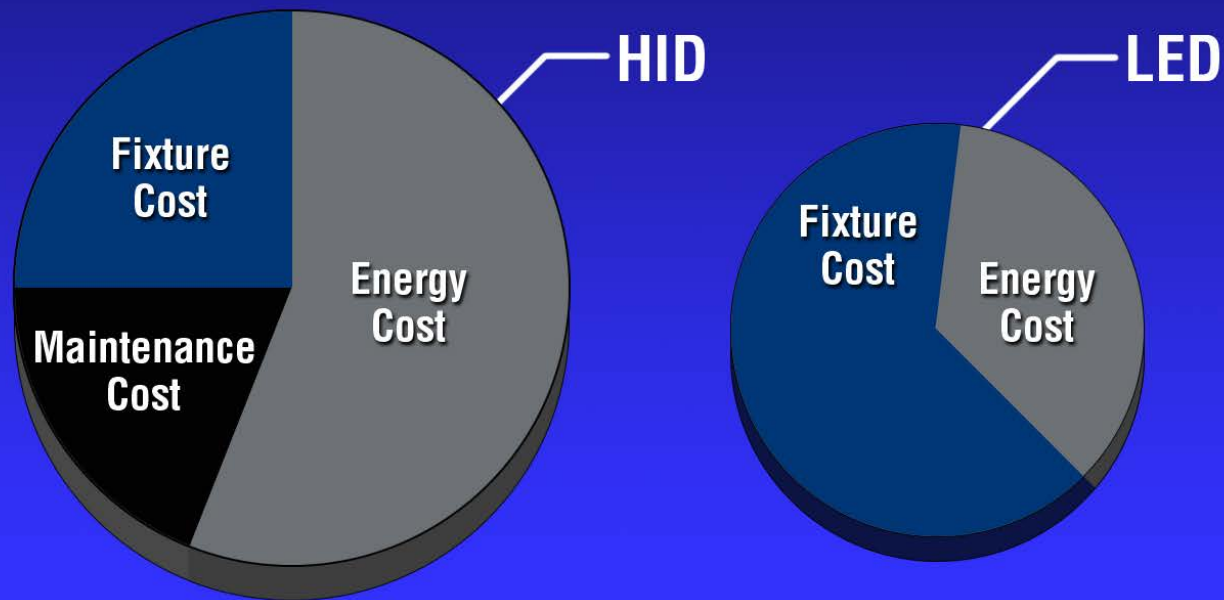
- 70 W MH (~ 4 mg of Mercury)
- 400 W MH (~ 60 mg of Mercury)

+ Coal Burning Power Plants



Cost Of Ownership

Value Analysis Total Cost of Ownership Illustration



Area light fixtures:

- A landscape lighting term that refers to the lighting of large landscaped areas.

Flood light fixtures:

- Artificial light in an intensely bright and broad beam.
- A unit that produces a beam of intense light; a flood.



Mounting



Area Light Fixture



Flood Light Fixture

Options:



AR6STBZ
Parking Area Light Arm
6" length for 4" or 6" tube
Bronze finish
Extruded Aluminum



AR12STBZ
Parking Area Light Arm
12" length for 4" or 6" tube
Bronze finish
Extruded Aluminum



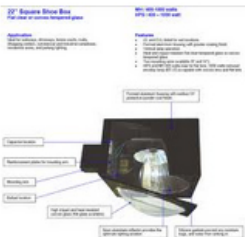
AR12RPBZ
Parking Area Light Arm
12" length for 4" pipe
Bronze finish
Extruded Aluminum



FL2.37TF270
Flood 2.37 Tenon Fitter
Fits 2 3/8" mast arm, 12" length
270 degree
Bronze finish
Die Cast Aluminium



Shoebox Snapshot



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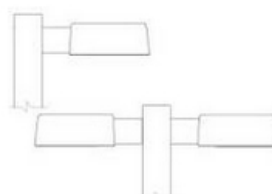


Photo	Stock #	Type	Parting
	JL-Q101	LED	LED
	JL-Q102	LED	LED
	JL-Q103	LED	LED
	JL-Q104	LED	LED



LED Area Light Fixtures

MLAR70LED50

LED - MEDIUM 70W AREA LIGHT

An efficient, energy saving replacement for metal halide and high-pressure sodium fixtures, containing an integral listed driver

Fixture can mount to parking fixture arm or flood elbow

FEATURES:

- Replaces up to 250 watt metal halide
- Lumens delivered: 4141
- Total watts consumed: 60.8 watts
- CCT: 5000K
- 50,000 hour life at L70 standards
- CRI: 67
- Full cutoff classification in type V pattern
- Self-contained driver
- Universal 120V through 277V
- Constructed without any hazardous materials
- Compatible with mechanical relay type Dusk to Dawn and Occupancy Sensor
- LM-79/80 data available
- 5 year limited warranty
- Does not attract insects
- BUG - B3/U0/G0 Rating
- Black ceramic paint frit reduces glare and improves appearance
- 100W and 140W models also available

CONSTRUCTION:

Fixture: Heavy-duty cast aluminum one-piece housing is polyester coated. Fixture is rust and corrosion proof and sealed to be dirt and bug proof.

Lens: Tempered Glass

LED Module: Copper plating to provide high thermal transfer rate minimizing junction temperature of LED

Finish: Dark Bronze

Luminaire Ordering Information:

WATTS	ORDER CODE	MODEL NUMBER	LUMENS	LIFE (Hrs.)	DIMENSIONS (L"xW"xH")	CCT
60.8	71324	MLAR70LED50	4141	50,000	16.5 x 16.5 x 7.5	5000

Lighting layouts and spacing criteria available upon request

MaxLite®: 1-800-555-5629 | Fax: 973-244-7333 | Web: www.maxlite.com | E-mail: info@maxlite.com



PROJECT NAME	
CATALOG NUMBER	
NOTES	
FIXTURE TYPE	ROOM SCHEDULE



AVAILABLE ARM CONFIGURATIONS

ORDER CODE	MODEL NUMBER	DESCRIPTION
71453	AR12RPBZ	12" Parking Arm
71454	AR6STBZ	6" Parking Arm
71455	AR12STBZ	12" Parking Arm

Arms ordered separately
*Hardware included



MLAR100LED50

LED - MEDIUM 100W AREA LIGHT

An efficient, energy saving replacement for metal halide and high-pressure sodium fixtures, containing an integral listed driver

Fixture can mount to parking fixture arm or flood elbow

FEATURES:

- Replaces up to 400 watt metal halide
- Lumens delivered: 6963
- Total watts consumed: 101.3 watts
- CCT: 5000K
- 50,000 hour life at L70 standards
- CRI: 68
- Full cutoff classification in type V pattern
- Self-contained driver
- Universal 120V through 277V
- Constructed without any hazardous material
- Compatible with mechanical relay type Dusk to Dawn and Occupancy Sensor
- LM-79/80 data available
- 5 year limited warranty
- 70W and 140W models also available
- Does not attract insects
- BUG - B3/U0/G0 Rating
- Black ceramic paint frit reduces glare and improves appearance

CONSTRUCTION:

Fixture: Heavy-duty cast aluminum one-piece housing is polyester coated. Fixture is rust and corrosion proof and sealed to be dirt and bug proof.

Lens: Tempered Glass

LED Module: Copper plating to provide high thermal transfer rate minimizing junction temperature of LED

Finish: Dark Bronze

Luminaire Ordering Information:

WATTS	ORDER CODE	MODEL NUMBER	LUMENS	LIFE (Hrs.)	DIMENSIONS (L"xW"xH")	CCT
101.3	71325	MLAR100LED50	6963	50,000	16.5 x 16.5 x 7.5	5000

Lighting layouts and spacing criteria available upon request

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PROJECT NAME	
CATALOG NUMBER	
NOTES	
FIXTURE TYPE	ROOM SCHEDULE



AVAILABLE ARM CONFIGURATIONS

ORDER CODE	MODEL NUMBER	DESCRIPTION
71453	AR12RPBZ	12" Parking Arm
71454	AR6STBZ	6" Parking Arm
71455	AR12STBZ	12" Parking Arm

Arms ordered separately
*Hardware included



The Training Department: Product and Marketing Division:



LED Flood Light Fixtures

MLAR FLOOD LIGHT

LED - FLOOD LIGHT

An efficient, energy saving replacement for metal halide and high-pressure sodium fixtures, containing an integral listed driver

Fixture can mount to parking fixture arm or flood elbow

FEATURES:

- Replaces up to 308 watt pulse start metal halide
- 70W – Lumens delivered 4141
100W – Lumens delivered 6963
- 70W – 60.8 total watts consumed
100W – 101.3 total watts consumed
- CCT: 5000K
- 50,000 hour life at L70 standards
- CRI: 68
- Full cutoff classification in type V pattern
- Self-contained driver
- Universal 120V through 277V
- Constructed without any hazardous material
- Compatible with mechanical relay type Dusk to Dawn and Occupancy Sensor
- LM-79/80 data available
- 5 year limited warranty
- Does not attract insects
- BUG – 70W: B3/U0/G0 Rating
100W: B3/U0/G0 Rating
- Black ceramic paint frit reduces glare and improves appearance

CONSTRUCTION:

Fixture: Heavy-duty cast aluminum one-piece housing is polyester coated. Fixture is rust and corrosion proof and sealed to be dirt and bug proof.

Lens: Tempered Glass

LED Module: Copper plating to provide high thermal transfer rate minimizing junction temperature of LED

Finish: Dark Bronze

Luminaire Ordering Information:

WATTS	ORDER CODE	MODEL NUMBER	LUMENS	LIFE (hrs.)	DIMENSIONS (L"xW"xH")	CCT
60.8	71324	MLAR70LED50	4141	50,000	16.5 x 16.5 x 7.5	5000
101.3	71325	MLAR100LED50	6963	50,000	16.5 x 16.5 x 7.5	5000

Lighting layouts and spacing criteria available upon request



PROJECT NAME	
CATALOG NUMBER	
NOTES	
FIXTURE TYPE	ROOM SCHEDULE



AVAILABLE ARM CONFIGURATIONS

ORDER CODE	MODEL NUMBER	DESCRIPTION
71456	FL2.37TF270	12" Flood Fitter

Arms ordered separately
*Hardware included



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The Training Department: Product and Marketing Division:



MaxLite Webinars

MaxLite has been hosting free webinars once per month on a variety of topics. A lot of great content has been presented, here's how to find it:

- MaxLite.com - click on the red “WEBINAR SCHEDULE & SIGNUP” button to see what's on the schedule. Click the “MAXLITE WEBINAR LIBRARY” icon to see previous webinars.
- Check/Subscribe to our YouTube channel
- Check/Subscribe to MaxLite News Room Blog
- Stay updated with our FaceBook/Twitter pages!
(Links located at the bottom of MaxLite.com)

Other Resources:

- IES/Photometric files, LM79/80 reports, and lighting layouts available. Contact David Delgado at ddelgado@maxlite.com
- Flood Light fixture PR on the MaxLite News Room Blog:
<http://www.maxlitenewsroom.com/?p=2062>





QUESTIONS & ANSWERS:

Thank you everyone for your attention.

This webinar session will be left open for the next 10 minutes to allow time for questions. We will answer as many questions as we have time for right now, but ALL questions will be answered via e-mail within the next 24 hours.

Thanks again for attending, and we hope to speak to you again, soon!

FOR MORE INFORMATION ABOUT OTHER MAXLITE PRODUCTS; OR FOR LIGHTING QUESTIONS IN GENERAL; PLEASE CONTACT:

info@maxlite.com

www.maxlite.com

1-800-555-5629

Or contact your MaxLite Representative or MaxLite's Regional Sales Manager.

