Nemalux™

Lighting That Improves Worksite Safety

MADE IN CANADA

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QR CONTACT

QR CODES OFFER INSTANT ACCESS TO US &
OUR PRODUCT DOCUMENTATION. ALL QR CODE
LINKS HAVE LIVE CHAT ENABLED FOR REAL-TIME
COMMUNICATION WITH OUR TEAM.

REQUEST INFO

CERTIFICATIONS

UL LLC - SAFETY CERTIFICATION

UL LLC - MARINE RATING

AMERICAN BUREAU OF SHIPPING

INTERNATIONAL DARK-SKY ASSOCIATION
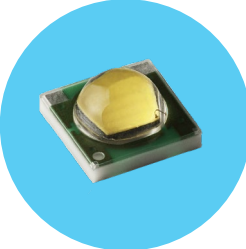
DESIGN LIGHTS CONSORTIUM

INTERTEK ETL CERTIFICATION

LABTEST CERTIFICATION INC.

Nemalux
is the primary
Canadian
manufacturer of
harsh & hazardous
location
luminaires

MADE IN CANADA

INDUSTRIAL GRADE

Light Emitting Diode (LED)
Nemalux uses reliable, high-quality diodes from CREE, Samsung, and Nichia. Underpowering these diodes reduces heat stress and premature aging. Reducing the current flow by 50-70% of the rated max value extends the usable life of LEDs. This increases longevity and reliability in the demanding temperature extremes of harsh and hazardous environments.
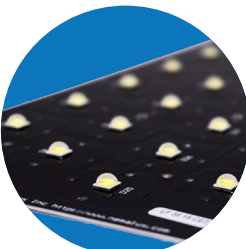
Light Engine (MCPCB)
A vital part of heat transfer from the LED to the external case is the metal core printed circuit board (MCPCB). This allows for a greater temperature range and extended luminaire performance by minimizing the component temperature increases. When practical the electrical systems utilize redundancy, enhancing reliability. The boards are field serviceable, allowing future upgrades and onsite replacements. They have quick-connect components making them a solder-free installation.

Secondary Optics
Optical control is instrumental in the lighting design and application process. Our modular optics deliver illumination where required and reduce light pollution. The use of secondary optics provides flexibility and enhances visual comfort. Nemalux's designers can suggest spacing, aiming and mounting heights for each project. As a result, projects receive improved visibility while reducing total cost of ownership.
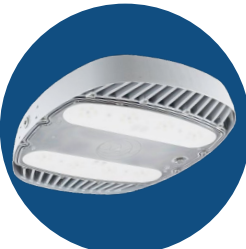
Glare Reduction Lenses
Lack of adequate illumination is a common factor affecting safety on industrial sites. Glare and light trespass can also contribute to a lower level of safety. Sharp cutoff and glare reduction lenses from Nemalux provide visual comfort and acuity. Mounting height, tilt angle, and optics are other factors for a positive outcome.

Power Supplies
Hazardous location rated power supplies are a key part of many Nemalux lights. Programming features deliver tailored lighting effects, balancing thermal management and efficiency. Dimming is available on many luminaires using 0-10V technology. For most power supplies L90 values are a good indicator of system lifetime.

Housing Design
Nemalux luminaires are constructed with a copper free aluminum alloy. These alloys are very effective heatsinks while resilient to chemicals and salt water. Anodizing or powder-coating provides increased resilience in hazardous and harsh environments. Nemalux's use of specialty powders provides multi-layer protection. This coating can withstand simultaneous exposure to corrosive chemicals, UV, and saltwater. Industrial enclosures can experience dramatic changes in temperature and humidity. Nemalux luminaires use pressure equalization vents with an IP66/67 rating. This helps relieve component stress and minimizes condensation effects. Advanced LED housing designs stimulate convective airflow and debris shedding. This lowers the operating temperatures for all electronics. Resulting in increased system life and ambient temperature range.

Mounting Hardware
The use of flexible mounting systems is instrumental for an optimized installation process. Nemalux's standard catalog includes an extensive range of brackets specific to each fixture. These diverse mounting options withstand severe vibration, impact, and chemical exposure. Optional secondary safety methods enhance fall protection. Short installation time reduces the cost of fixture placement. Additionally engineering, procurement, maintenance, and installation efforts are reduced.

Field Serviceability
Nemalux offers many luminaires with field serviceable components. This allows upgrades and maintenance opportunities beyond the warranty period. Bulb and ballast replacements were important for conventional High-Intensity Discharge lights that are designed with service in mind. The emergence of LED technology has caused a shift to non-serviceable / sealed systems. This approach is challenging and forces the disposal of valuable lights. A more effective approach is to replace aging components and extend the system life.

LAYOUT SUPPORT

Nemalux provides lighting design services for harsh and hazardous locations. These locations include Oil & Gas, Chemical, Mining, Heavy Industrial, Military & Aerospace, Municipal Infrastructure, Rail, and Marine Terminals.

Drawings or basic dimensional details allow lighting designers to run calculations and prepare reports. These illustrate future illumination results. Following suggested luminaire locations and mounting details streamlines the installation process. Supporting the successful delivery of complex projects.

Why Nemalux?

Durable Lighting Technology
LED luminaires for harsh and hazardous location use. Human-centric lighting that improves safety and productivity.

Versatile Deployment Options
Light fixtures featuring various optical and mounting options. Tailored lighting systems to address challenging projects.

Total Lifetime Value
Lower initial cost, simplified installation, and field serviceable components result in excellent value

Expert Support Services
In-house lighting design and product engineering expertise. Lighting outcome-based philosophy vs a simplistic product-centric approach.

Short Lead Times
An extensive component stocking program with just-in-time manufacturing from our Canadian facility.

NEMALUX MR6 LIGHTS USING TYPE 1 OPTICS EVERY 12M VERSUS COMPETITORS LIGHTS INSTALLED EVERY 6M
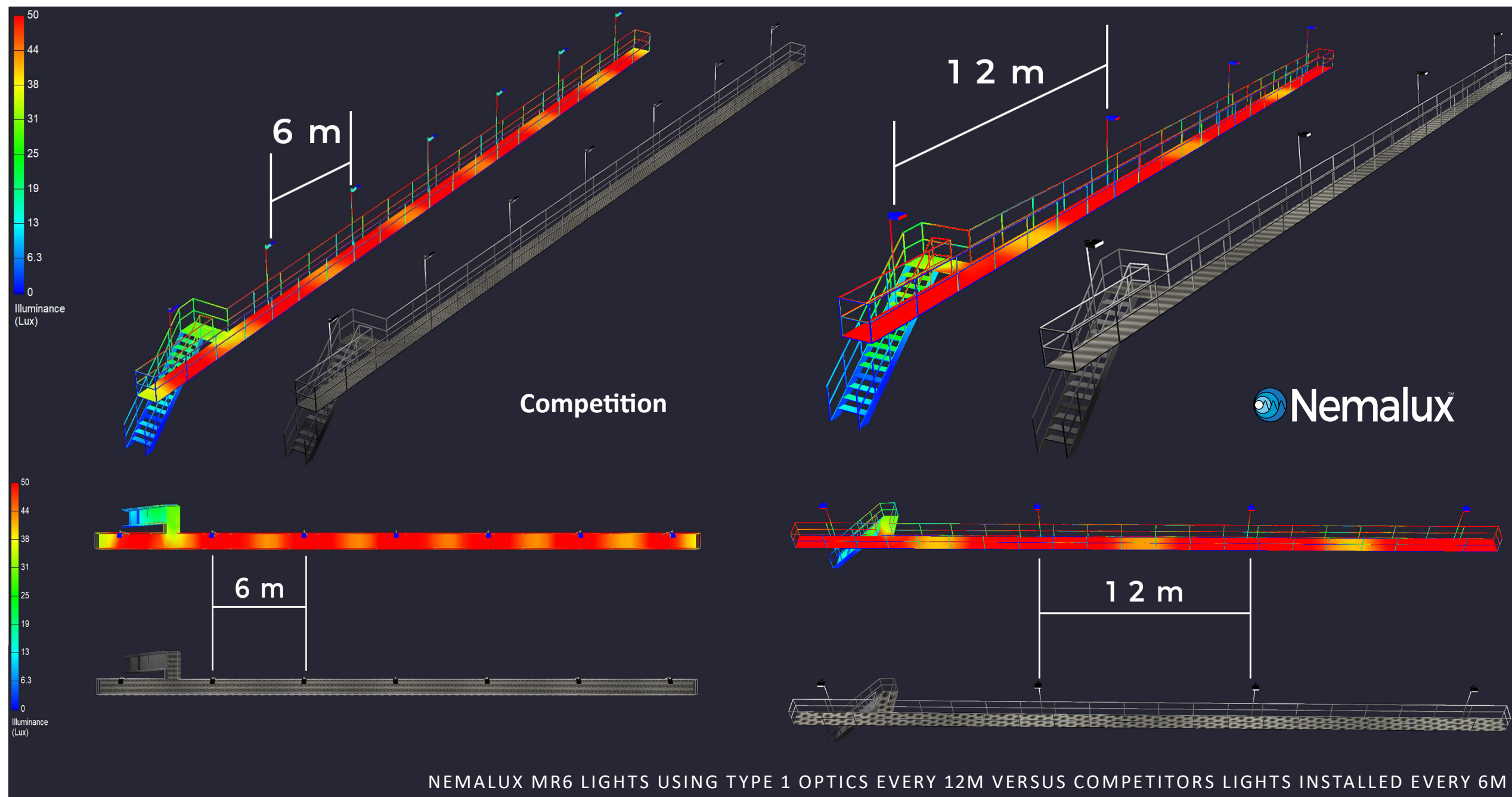
QUICK SELECTION GUIDE

Application	Nemalux Model	NEC/CEC CLASS I				NEC/CEC CLASS II					UL1598	UL1598A (Marine)	Lumen Output					Lens Material				Colour Temp			Optical Profiles*							Environmental			Low Ambient	High Ambient
		Division 1	Division 2	Zone 1	Zone 2	Division 1	Division 2	Zone 20	Zone 21	Zone 22			500 - 5,000	5,000 - 10,000	10,000 - 20,000	20,000 - 30,000	30,000 - 50,000	Polycarbonate	Glass	Clear	Frosted	3,000 K	4,000 K	5,000 K	Wide Beam	Narrow Beam	Type 1	Type 2	Type 3	Type 4	Type 5	IP66	IP67	IP68**		
Pole Mount	AR Series		●		●		●			●	●	●			●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●	●	●		-40°C	+55°C
	XR Series		●		●		●		●	●	●	●			●	●		●		●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	-50°C	+75°C
	MR Series		●		●		●			●	●	●	●	●				●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-40°C	+55°C
	JR Series		●		●	●	●			●	●	●	●	●				●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-40°C	+60°C
High Bay/ Low Bay	AR Series		●		●		●			●	●	●			●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●	●	●		-40°C	+55°C
	XR Series		●		●		●		●	●	●	●			●	●		●		●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	-50°C	+75°C
	MR Series		●		●		●			●	●	●	●	●				●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-40°C	+55°C
	JR Series		●		●	●	●			●	●	●	●	●				●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-40°C	+60°C
Yoke Mount	AR Series		●		●		●			●	●	●			●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●	●	●		-40°C	+55°C
	XR Series		●		●		●		●	●	●	●			●	●		●		●	●	●	●	●	●	●	●	●		●	●	●	●			-50°C	+75°C
	MR Series		●		●		●			●	●	●	●	●				●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		-40°C	+55°C
	JR Series		●		●	●	●			●	●			●				●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		-40°C	+60°C
Linear	GS Series AC		●		●		●			●				●		●		●		●		●	●	●		●	●					●	●		-40°C	+65°C
	GS Series DC		●		●		●			●				●				●		●		●	●	●		●	●					●	●	●	-40°C	+60°C
	NL Series		●		●		●			●				●				●		●		●	●	●		●	●					●			-40°C	+53°C
	BL Series		●		●		●		●	●				●				●		●		●	●	●		●	●					●	●		-50°C	+65°C
Dark Sky Certified	AR Series		●		●		●			●	●			●				●		●		●	●	●	●	●	●	●	●		●	●		-40°C	+55°C
	XR Series		●		●		●	●		●	●			●	●			●		●		●	●	●						●	●	●	-50°C	+75°C
	MR Series		●		●		●			●	●			●	●			●		●		●	●	●	●	●				●	●		-40°C	+55°C
	GS Series AC		●		●		●			●				●				●		●		●	●	●		●	●					●	●		-40°C	+65°C
	GS Series DC		●		●		●			●				●				●		●		●	●	●		●	●					●	●	●	-40°C	+60°C
Specialty	EXC Series	●	●	●		●	●	●				●			●				●		●	●	●	●							●			-50°C	+58°C
	CANLED Series		●									●							●	●	●	●	●	●	●	●					●			-40°C	+55°C
	XCANLED Series		●									●							●	●	●	●	●	●	●	●					●			-40°C	+55°C
Temporary	LS Series		●		●	●		●					●					●		●	●	●	●	●						●	●		-20°C	+60°C
	JR Series		●		●	●	●			●		●	●	●				●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-40°C	+60°C
	ZLM Series										●				●	●		●		●		●	●		●	●		●			●			-40°C	+55°C

Notes:
*Custom optics are available upon request
**IP68 models are rated for General Location use only

JR SERIES

2,000 – 5,000 lumen compact luminaire

Features

- Designed for marine, harsh, and hazardous location use
- Compact and multi-functional luminaire for challenging applications
- Thermal separation of LED and power supply allows max ambient temperatures of up to +60°C
- Marine grade copper-free aluminum housing with multi-layer powder coated finish
- Approved for through-wiring of multiple luminaires on a single circuit
- Provided with standard glass or special order polycarbonate* lens
- Available in two lumen output models with several beam profiles
- 3 x 3/4" NPT Entrees & 0-10V dimmable

Technical Specs

Voltage: AC: 120-277 VAC | HV: 347 VAC** (50/60 Hz)

Ingress Protection: IP66 | IP67 | IP68**

Temp Range: -40°C to +60°C

Certification: UL 844; UL 1598; UL 1598A; UL 8750;
CSA C22.2 No. 250.0-08, CSA C22.2 No. 250.13-17;
Class I, Division 2 Groups ABCD, T3;
Class II, Division 1 & Division 2 Groups FG, T3
Class III, Division 1 & Division 2
Class 1, Zone 2, Group IIC | Zone 22
IEC 60529, C22.2

* The polycarbonate lens is not rated for Class II Division 1

** The 347 VAC & fully encapsulated (IP68) versions are rated for General Location use only

Fixture

2.58 kg | 5.68 lbs
(mounting bracket excluded)
7.0 in x 8.0 in x 4.4 in

Slip Fitter Yoke Mount (JR-SFY)

Mounting Options *(ordered separately)*

Surface (JR-SM)   Wall 2 (JR-WM2)   Pole (JR-PM)   Yoke (JR-YM)   Hook (JR-HK)   Conduit (JR-CM)   High Vibration (JR-YK)

MR SERIES

3,000 – 6,000 lumen versatile luminaire

Features

- Designed for marine, harsh, and hazardous location use
- Wide range of optical distribution patterns for superior lighting quality
- Field serviceable light engines, power supply and housing elements
- Approved for through-wiring of multiple units on a single circuit
- Multiple mounting options for deployment flexibility
- Optimized thermal management for all electronics
- Built-in junction area for simplified termination

Technical Specs

Voltage: AC: 120-277 VAC (50/60 Hz) | HV: 347 VAC (50/60 Hz)

Ingress Protection: IP66 | IP67 | IP68*

Temp Range: -40°C to +55°C

Certification: UL 844, UL 1598 & UL 1598A & UL 8750;
CSA C22.2 No. 137, CSA C22.2 No. 250.0, CSA C22.2 No. 250.13;
Class I, Division 2, Groups ABCD, T4;
Class II, Division 2, Groups FG, T4A;
Class I, Zone 2, Groups IIC;
Zone 22

* The fully encapsulated (IP68) versions are rated for General Location use only

Fixture

4.6 kg | 10.4 lbs
(mounting bracket excluded)
11.5 in x 14.5 in x 2.5 in

Slip Fitter Yoke Mount (MR-SFY)

Mounting Options *(ordered separately)*

Surface (MR-SM)   Suspension (MR-SM)   Pole (MR-PM)   Wall (MR-WM2)   Yoke (MR-YM)   Hook (MR-HK)   Conduit (MR-CM)   SFY1.5 (MR-SFY1.5)

XR SERIES

8,000 – 20,000 lumen multi-functional luminaire

Features

- Designed for marine, harsh, and hazardous location use
- Thermal separation of LED and power supply allows max ambient temperatures of up to +75°C
- Wide range of optical distribution patterns for superior lighting quality
- Field serviceable light engines, power supply and housing elements
- Approved for through-wiring of multiple units on a single circuit
- Multiple mounting options for deployment flexibility
- Built-in junction area for simplified termination

Fixture
8.1 kg | 17.8 lbs
(mounting bracket excluded)
18.74 in x 14.88 in x 3.78 in

Slip Fitter Yoke Mount (XR-SFY)

Technical Specs
Voltage: AC: 120-277 VAC (50/60 Hz) | HV: 347-480 VAC (50/60 Hz)
Ingress Protection: IP66 | IP68*
Temp Range: -50°C to +75°C
Certification: UL 844; UL 1598 & UL 1598A; UL 8750;
CSA C22.2 No. 250.0-08, CSA C22.2 No. 250.13-17, CSA C22.2 No. 137-18;
Class I, Division 2 Groups ABCD / Class I, Zone 2, Groups IIC;
Class II Division 2 Groups FG / Class I, Zone 22, Groups IIIB;
Class III

* *The fully encapsulated (IP68) versions are rated for General Location use only*

Mounting Options *(ordered separately)*

Surface (XR-SM)   Pole (XR-PM)   Wall (XR-WM2)   Yoke (XR-YM)   Hook (XR-HK)   Conduit (XR-CM)   High Vibration (XR-YK)   SFY1.5 (XR-SFY1.5)

AR SERIES

10,000 – 50,000 lumen high output floodlight

Features

- Designed for marine, harsh and hazardous location use
- Housing geometry and specialty powder coat prevents debris buildup and staining
- Wide range of optical distribution patterns for superior lighting quality
- Field serviceable light engines, power supply and housing elements
- Approved for through-wiring of multiple units on a single circuit
- Multiple mounting options for deployment flexibility
- Built-in junction area for simplified termination

Fixture
16.4 kg | 36.0 lbs
(mounting bracket excluded)
24.0 in x 20.0 in x 4.3 in

Slip Fitter Yoke Mount (AR-SFY)

Technical Specs
Voltage: AC: 120-277 VAC | HV: 347-480 VAC (50/60 Hz)
Ingress Protection: IP66 | IP67
Temp Range: -40°C to +55°C
Certification: UL 844; UL 1598 & UL 1598A; UL 8750;
CSA 22.2 No. 137, CSA 22.2 No. 250.0, CSA 22.2 No. 250.13;
Class I, Division 2, Groups ABCD; | Class II, Division 2, Groups FG;
Class I, Zone 2, Groups IIC; | Class I, Zone 22, Groups IIIB;
Class III

Mounting Options *(ordered separately)*

Surface (AR-SM)   Pole (AR-PM)   Wall (AR-WM2)   Yoke (AR-YM)   Hook (AR-HK)   Conduit (AR-CM)   High Vibration (AR-YK)   SFY1.5 (AR-SFY1.5)

GS SERIES

500 – 5,000 lumen linear low-profile luminaire

Features
- Designed for marine, harsh, and hazardous location use
- 12 or 24 Volt DC as well as 120 Volt AC direct input circuit board / light engine
- Light weight and low-profile housing allow for deployment in complex areas
- Vented enclosure to prevent stress on electronics and gaskets
- Sealed housing provided with 3ft cable and cable gland
- Adjustable mounting brackets allows for 360° rotation

Technical Specs
Voltage: DC: 12: 11-16 VDC | 24: 22-28 VDC | 24H: 22-28 VDC
AC: 120 VAC ± 10% (60 Hz)
Ingress Protection: IP66 | IP67 | IP68*
Temp Range: -40°C to +65°C
Certification: UL 844, UL 1598, UL 1598A, UL 2108;
CSA 22.2 No. 137, CSA 22.2 No. 250.0;
Class I, Division 2, Groups ABCD, T4;
Class II, Division 2, Groups FG, T6;
Class III;
Class I, Zone 2, Group IIC; Zone 22

* The fully encapsulated (IP68) versions are rated for General Location use only

Fixture
GS-1: 0.8 kg | 1.8 lbs
- Length: 15.5 in

GS-2: 1.2 kg | 2.6 lbs
- Length: 26.5 in

GS-3: 1.8 kg | 3.9 lbs
- Length: 37.5 in

GS-4: 2.4 kg | 5.3 lbs
- Length: 48.5 in

Mounting Options

A - Adjustable Mounting Bracket   B - Carriage Bolt / Surface Mount

GS-DC

GS-AC

BL SERIES

2,000 – 4,000 lumen 18 inch linear luminaire

Features
- Designed for marine, harsh, and hazardous location use
- Field serviceable light engines, power supply and housing elements
- Approved for through-wiring of multiple units on a single circuit
- Copper free aluminum housing with polycarbonate or glass lens
- Lightweight replacement for conventional vapor tight lights
- Built-in junction area for simplified termination

Adjustable Yoke Mount (BL-YM)

Technical Specs
Voltage: AC: 120-277 VAC (50/60 Hz) | HV: 347 VAC* (50/60 Hz)
Ingress Protection: IP66 | IP68*
Temp Range: -50°C to +65°C
Certification: UL 844; UL 1598 & UL 1598A; UL 8750;
CSA 22.2 No. 250.0, CSA 22.2 No. 250.13, CSA 22.2 No. 137;
Class I, Division 2, Groups ABCD, T4A;
Class II, Division 2, Groups FG, T6;
Class III;

* The fully encapsulated (IP68) versions are rated for General Location use only

Fixture
2.9 kg | 6.4 lbs
(mounting bracket excluded)

18.43 in x 5.65 in x 3.93 in

Mounting Options (ordered separately)

Surface (BL-SM)   Hook (BL-HK)   Conduit (BL-CM)   Wall (BL-WM)   Tube Clamp (BL-TC)   Strap Mounting

NL SERIES

4,000 – 14,000 lumen linear high output luminaire

Features

- Designed for marine, harsh, and hazardous location use
- High intensity linear LED replacement for conventional vapor tight lights
- Field serviceable light engines, power supply and housing elements
- Copper free, extruded aluminum housing with polycarbonate lens
- Approved for through-wiring of multiple units on a single circuit
- Angle adjustable mounting bracket allows for 360° rotation
- Built-in junction area for simplified termination

Fixture

NL-2: 5.3 kg | 12.0 lbs
- Length: 27.3 in

NL-4: 8.6 kg | 19.0 lbs
- Length: 50.8 in

Technical Specs

Voltage: AC: 120-277 VAC (50/60 Hz) | HV: 347-480 VAC (50/60 Hz)
Ingress Protection: IP66
Temp Range: -40°C to +55°C
Certification: UL 844; UL 1598 & UL 1598A; UL 8750;
CSA 22.2 No. 137, CSA 22.2 No. 250.0, CSA 22.2 No. 250.13;
Class I, Division 2, Groups ABCD;
Class II, Division 2, Groups FG;
Class III;
Class I, Zone 2, Groups IIC; Class I, Zone 22, Groups IIIB

Mounting Options (ordered separately)

Surface / Ceiling & Suspended Mount

Angle Adjustable Mount & Swivel Bracket

EXC SERIES

1,200 lumen explosion proof luminaire for confined space applications

Features

- Explosion-proof luminaire designed for confined space and low clearance applications
- Built-in junction box with three 3/4" NPT entries on three sides
- Copper free, marine grade aluminum housing with glass lens
- No arcing, sparking or hazardous temperature components
- Tested to withstand more than 2,500 psi internal pressure
- Thermally managed for maximum longevity

Fixture

4.4 kg | 9.8 lbs
(mounting bracket excluded)

11.5 in x 6.5 in x 3.76 in

Technical Specs

Voltage: AC: 120-277 VAC (50/60 Hz) | DC: 22-28 VDC
Ingress Protection: IP66
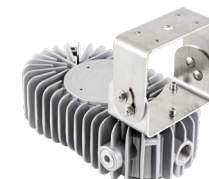**Temp Range:** -50°C to +58°C
Certification: UL 844; UL 1598; UL 8750;
CSA 22.2 No. 250.0, CSA 22.2 No. 250.13, CSA 22.2 No. 137;
Class I, Division 1, Groups CD T5;
Class II, Division 1, Groups EFG T4A;
Class III, Division 1;
Class I, Zone 1, Group IIB; Class II, Zone 20, Group IIIC

Mounting Options (ordered separately)

Surface - built in

Yoke (EXC-YM) - ordered separately

SPECIALTY

XCANLED Series
1,996 - 2,334 lumen fixture

12-24 VDC
4.3 kg | 9.5 lbs
Ø7.0" x 5.0"
-40°C to +55°C
IP66

CANLED Series
469 - 587 lumen fixture

12-24 VDC
1.04 kg | 2.3 lbs
Ø3.47" x 5.29"
-40°C to +55°C
IP66

TEMPORARY

ZLM Series
22,000 - 28,000 lumen fixture

120-277 VAC
10.0 kg | 22.0 lbs
15.5" x 6.8" x 7.1"
-40°C to +45°C
IP66

General Location Only

LS Series
1,550 lumens per module

120 VAC
1.2 kg | 2.6 lbs per module
9.7"x 3.3" per module
-50°C to +70°C
IP66 / IP67

Light Stringer can have up
to 30 LED modules per string

SUPPORT STRUCTURES

Top Hat Retrofit Adapter
Upgrade existing Crouse Hinds mounting hoods
with Nemalux luminaires

Quick & easy installation
Re-use existing wiring
Reduce maintenance

JR Series   MR Series   XR Series

Solar GS
Pre-assembled system

IP66 / IP67
GN & HZ

Swivelpole
Pre-wired & pre-assembled
c/w the MR Series
c/w the XR Series

IP66 / IP67
GN & HZ

Bullrail GS
c/w GS2 in protective case

IP66 / IP67
GN & HZ

ARTSU
Articulating strut
pole assembly

IP66 / IP67
GN & HZ

GS Shield
Back light prevention shield
c/w the GS Series

IP66 / IP67
GN & HZ

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