Ishat-r-shield'.....



Marine Application Guide

LED Lighting for Corrosive Environments







Class 1 Div 2, Groups: A, B, C, D Class 2 Div 2, Groups: F, G Class 3 Div 1 & 2

The Incoplas[™] LED Hybrid for Hazardous Locations is designed for harsh and hazardous areas within marine environments, like engine rooms. Because of its corrosion-resistant and rugged properties, this fixture will withstand the harshest environments. This fixture is also able to support **120V DC** power, ideal for marine applications.

Engine Rooms • Offshore Drilling Rigs • Docks

Ironclad™ Wash Down High Bay

The Ironclad[™] Wash Down High Bay is a high-output, 26,000 lumens, **NSF rated** LED fixture designed for use in areas exposed to frequent high-pressure wash-downs, like fish processing facilities and for areas which experience exposure to corrosive elements.

Fish Inspection & Processing Dock Lighting • Outdoor Areas





Incoplas™LED Hybrid

The Incoplas[™] LED Hybrid withstands the tough and corrosive conditions present in marine applications. Manufactured with thermally conductive engineered polymers and 316 stainless steel screws, this fixture will hold up in harsh marine environments. This fixture also supports **120V DC power.**

Shipbuilding • Docks Marinas • Ferry Boats



The **lightweight build** of the Incoplas[™] LED Vapor Tight makes it the perfect addition to any ferry or boat. It's manufactured with the same thermally conductive engineered polymers and 316 stainless steel screws as the other products in the Incoplas[™] family, making it resistant to areas where corrosion is a concern and other harsh environments exist. Additionally, this fixture is compatible with **120V DC** power sources.

Ferry Boats • Cargo Holds • Docks • Marinas

Ironclad[™] Vapor Tight High Bay

The Ironclad[™] Vapor Tight High Bay is a fixture designed to withstand harsh applications and prolonged exposure to moisture. This fixture would be ideal in heavy industrial areas, like cargo holds because of its corrosion-resistance and rugged build.

Shipbuilding • Cargo Holds • Marinas



Certifications Matrix

	ABS	UL 1598A	NEMA 4X	IP69K	IP68	IP67	IP66	IP65	UL Wet Locations	UL Damp Locations
Incoplas™ LED Hybird Hazardous Locations	<	\checkmark	\checkmark							
Incoplas™ LED Hybrid	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark		\	• • • • • • • • • • • • • • • • • • • •
Incoplas™ LED Vapor Tight		\checkmark	\checkmark				<		\checkmark	
Ironclad™ Vapor Tight High Bay			\checkmark			\checkmark	1	\checkmark	1	
Ironclad™ Wash Down High Bay				1			1			

Incoplas™ LED Hybrid Hazardous Locations



ABS, UL 1598A, UL 1598A, UL 844, IP69K, IP66, NEMA 4X, NEMA 5, NSF, DLC, USDA, cULus, Class 1 Div 2, Class 2 Div 2, Class 3 Div 1 & 2

Watts: 45, 90 Lumens: Up to 5,600 (45W) Up to 11,200 (90W)

LPW: 124 Operating Temp: -22°F to 113°F -30°C to 45°C CCT: 4000K, 5000K CRI: 70+ Weight: 7.5 lbs. L70 > 60,000 hours Projected Hours: >100,000





ABS, UL 1598A, UL 1598A, IP69K, IP66, NEMA 4X, NEMA 5, NSF, DLC, USDA, cULus

Watts: 45, 90 Lumens: 5,000 (45W) 10,000 (90W)

LPW: 111 **Operating Temp:** -22°F to 113°F -30°C to 45°C

CCT: 4000K, 5000K CRI: 70+ Weight: 7.5 lbs. L70 > 60,000 hours Projected Hours: >100,000

Incoplas™ LED Vapor Tight



UL 1598A, UL 1598, UL Wet Location, UL, NEMA 4X, NEMA 5, IP66, DLC, NSF, USDA

Watts: 35, 70 Lumens: 3,500 (35W) 7,000 (70W)

LPW: 100 Operating Temp: -22°F to 113°F -30°C to 45°C

CCT: 5000K CRI: 80 Weight: 5 lbs. L70 > 54,000 hours Projected Hours: 85,000

lronclad™ LED Vapor Tight High Bay



IP67, IP66, IP65, UL Wet Location, UL 1598, NEMA 4X, NEMA 5, DLC, USDA, NSF, cULus, RoHS,

Watts: 158, 236 Lumens: 22,120 (158 W) 32,860 (236W) LPW: 140 Operating Temperature: -40°F to 122°F -40°C to 50°C CCT: 4000K, 5000K CRI: 80 Weight: 30 lbs.

L70 > 72,000 hours

Projected Hours: >100,000

Ironclad™ Wash Down High Bay



IP69K, IP66, DLC, RoHS, cULus, NSF

Watts: 200 Lumens: 26,000 LPW: 130 Operating Temperature: -22°F to 122°F -30°C to 50°C CCT: 5000K CRI: 80 Weight: 16 lbs. L70 > 50,000 hours Projected Hours: >100,000