200+ Patent Certificates\$1,000,000+ Annual Energy Saving20,000+ Projects Successfully Installed





Coastal Lighting Solutions

Innovative & Tailored Lighting Solutions for **Success** www.aokledlight.com

Key Factors of Coastal Outdoor Lighting Fixtures



When choosing outdoor lighting for seaside environments, several key factors are essential for durability and performance.



Corrosion-Resistant Housing:

Opt for fixtures made from marine-grade materials like aluminum or stainless steel, with protective coatings to withstand salt and humidity.



Amber LED Lights:

WARRANTY

Use amber LEDs to protect sensitive coastal habitats and reduce disruption to wildlife, such as sea turtles and birds.



Dustproof and Waterproof Design:

Ensure fixtures have high IP ratings to guard against sand, dust, and moisture, especially in beach sports and recreational areas.



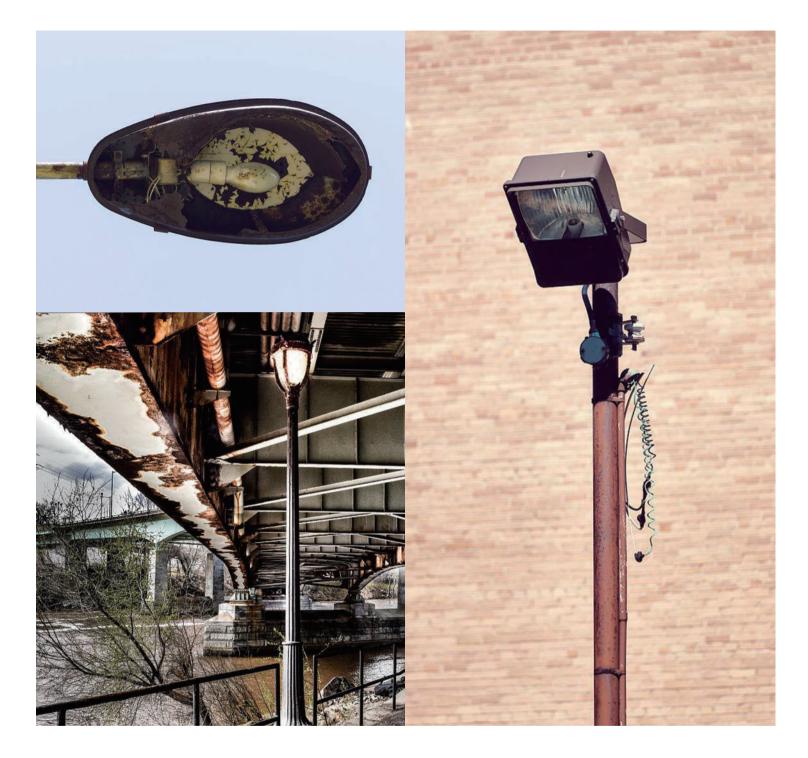
Solar-Powered Solutions as An Option:

Solar lights offer energy-efficient, eco-friendly options, ideal for remote coastal areas with limited access to traditional power sources.

By considering these factors, you can select the best outdoor lighting solutions for seaside applications, ensuring durability, environmental protection, and optimal performance in coastal environments.



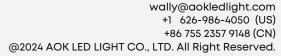
Coastal Corrosion



Why Anti-Corrosion?

In coastal environments, the air has a higher salt content, increasing its electrical conductivity and making it easier for electrons to transfer. This accelerates the oxidation process, causing metal products to rust more quickly.

Additionally, the elevated moisture levels in coastal air, combined with constant exposure to water and oxygen, further promote oxidation, intensifying the rusting of metal surfaces.





Anti-corrosion Housing & Treatment



Die-casting Aluminium

Lightweight with excellent ductility, high strength, and corrosion resistance, this material forms a protective oxide layer when used in coastal lighting. Outdoor fixtures made from it are durable and require minimal maintenance, ensuring long-lasting performance.

C5/WF4 Grade Anti-UV Thermosetting Painting

The luminaire's surface treatment is coated with imported Akzo Nobel powder with C5/WF4 grade, significantly reducing environmental corrosion. It offers excellent resistance to coastal salt spray, oxidation, weathering, and UV exposure, ensuring long-lasting protection and durability.





2000+ Hrs Salt Spray Corrosion Resistance Test

The product has undergone rigorous salt spray testing for up to 2000 hours (NSS/ASS/CASS standard), confirming that its housing and coating can withstand corrosive elements such as strong acids, alkalis, and high salinity in extreme environments. This ensures the product's longevity and reliability.

C5 Anti-corrosion Standard

The CS anti-corrosion standard represents the highest level of corrosion protection, designed primarily to safeguard metal materials like steel from severe corrosion. To meet this standard, the surface coating must offer exceptional resistance to corrosive elements such as strong acids, alkalis, and high salinity in extreme environments. Additionally, the C5 anti-corrosion standard requires the material to demonstrate outstanding wear resistance, aging resistance, and strong adhesion for long-lasting durability.

· The WF1 to WF4 Ratings of Luminaire Indicate Varying Levels of Corrosion Protection

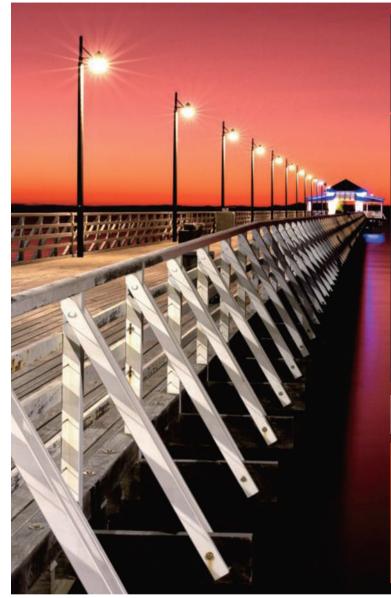
- WF1: Resistant to salt spray corrosion for over 250 hours, suitable for indoor or dry outdoor environments.
- WF2: Withstands salt spray corrosion for over 500 hours, ideal for indoor or outdoor settings with high humidity.
- WF3: Resistant to over 1000 hours of salt spray, designed for marine climates or harsh environments.

- WF4: Provides protection against more than 2000 hours of salt spray, suitable for environments with high salinity and other corrosive conditions.

A New Form of Green Light

Light sets the pace of our lives. Artificial light can be truly annoying. It can throw both us and nature off balance - with far-reaching consequences for insects and the entire downstream food chain.

AOK offers particularly animals & insects friendly light with 2200K~2700K options to reduce impact on the environment.



Fish also face issues with artificial lighting:

Melatonin levels are suppressed, leading to disruptions in sleep and reproductive cycles. As a result, eggs may not hatch on time or may fail to hatch altogether.



Sea turtles live in the ocean but lay their eggs on the beach:

Artificial lighting interferes with nesting behavior. Newly hatched marine turtles rely on the bright horizon over the ocean to navigate towards the sea, but artificial lights can confuse them, leading them away from the water.



Coral reproduction is affected by artificial light:

Many coral species reproduce during a single night each year in an event known as mass coral spawning, which helps maximize reproductive success. This process is timed and triggered by moonlight, but artificial lighting is thought to interfere, reducing its effectiveness.

What Can We Do to Reduce the Impact?

- Avoid lighting areas where wildlife rests, forages, or travels.
- Focus illumination only where it's truly necessary and keep the brightness low.
- Opt for warmer color temperatures, as they are less disruptive to local ecosystems.



Prevent lighting areas where animals and insects rest, forage, or traverse.



Light only what is necessary and maintain a suitable intensity.



Opt for warmer color temperatures that are less disruptive to the local ecosystem.

Animals & Insects Friendly 2200K-2700K CCT available

Amber LED Optional



Dust and Water Proof



Outdoor coastal luminaires are constantly exposed to dust, storms, and other harsh weather conditions. The AOK Coastal Lighting Solution features an IP66 rating and a streamlined, self-cleaning housing design, ensuring the fixture is fully waterproof, dustproof, and capable of withstanding extreme weather like heavy rain. This makes it an ideal choice for beach environments.



Solar Power Optional



Positioned directly on the beach, these solar luminaires capture solar energy to create a bright and safe environment for nighttime beachgoers. With advanced energy storage and autonomy, the solar panels ensure reliable illumination for extended periods. The new lighting delivers excellent visibility and high visual comfort while also being highly resistant to the harsh coastal conditions, ensuring a long-lasting lifespan.

A Cost-effective Solution

Due to the durability of the materials used and the long lifespan of the LEDs, the solar lighting system can function for many years with minimal maintenance.

A Winning Solution on All Fronts

The off-grid or hybrid solar lighting solution has transformed coastal areas into safer and more inviting spaces at night, benefiting both the local community and tourists who now spend more time outdoors. This increased activity has boosted business for beachfront restaurants and surf shops. As a clean, renewable energy source that produces zero greenhouse gas emissions, solar lighting also reflects a strong commitment to sustainability and environmental responsibility.

Products Introduction-LED Street Light



Products Introduction-LED Area & Flood Light



Parkinglot Light LED Area Light POWER: 75W-230W

Up to 150 lm/W



LED Area Light LED Shoebox Light

POWER: 75W-420W Up to 172 lm/W

CCT & Power Adjustable Optional



LED Flood Light LED Area Light POWER: 30W-300W Up to 150 lm/W F Series

LED Area Light Shoebox / Parking lot lighting POWER: 75W-230W Up to 140 lm/W



Products Introduction-LED Solar Street Light

