A Y A

selux

Application Guide

Form Follows **Magic**

Aya

A new generation of luminaires where technology meets design; inspired by the magic of nature.

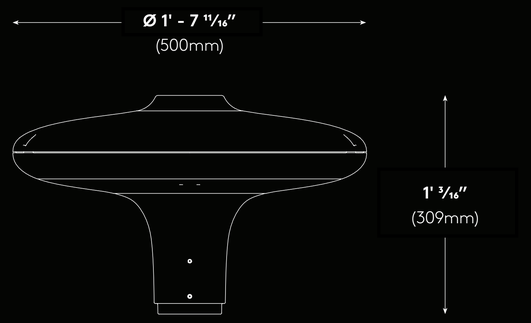
Aya address ecological challenges through the latest scientific insights. It redefines the harmony between people, nature, design, and functionality — allowing both humans and nature to thrive.

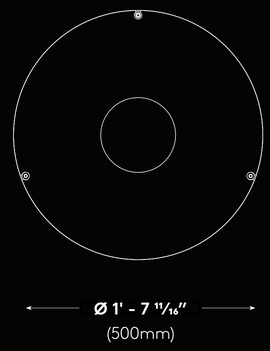
With forward-looking features and a timeless form; Aya places sustainability at the heart of the design. Inspired by nature and designed in harmony with it.

PRODUCTS AN WINNER

Architectural Products PIA'25 product innovation award

Minimal Form.
Maximum Impact.





Product Specifications

Series:
Aya

Mounting:
Single Post Top; straight or tapered pole
Lateral Arm Pole Mount; single or double
Catenary

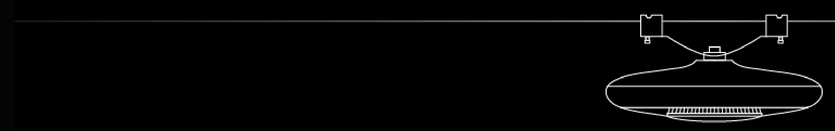
Distributions:
Symmetric Round
Symmetric Wide
Asymmetric

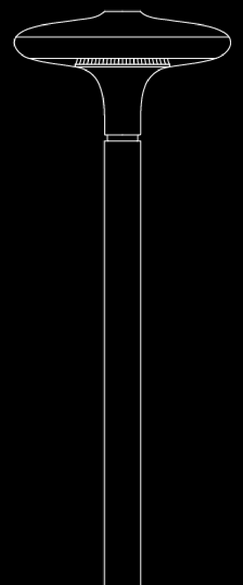
Output:
Max Output up to 7,854lm
High Output up to 5,429lm
Low Output up to 2,881lm
Up to 126lm/W

CCT:
Biological Red with 2700K White
2200K
2700K
3000K
3500K
4000K
5000K

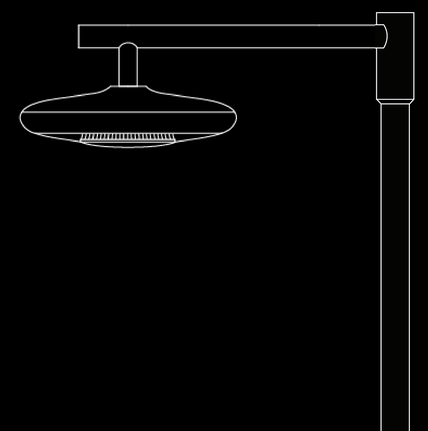
Options:
DALI-2 Dimming
GFCI/USB receptacles
Sensor with Photocell option on pole
NEMA Socket
Decorative Base Covers

new!

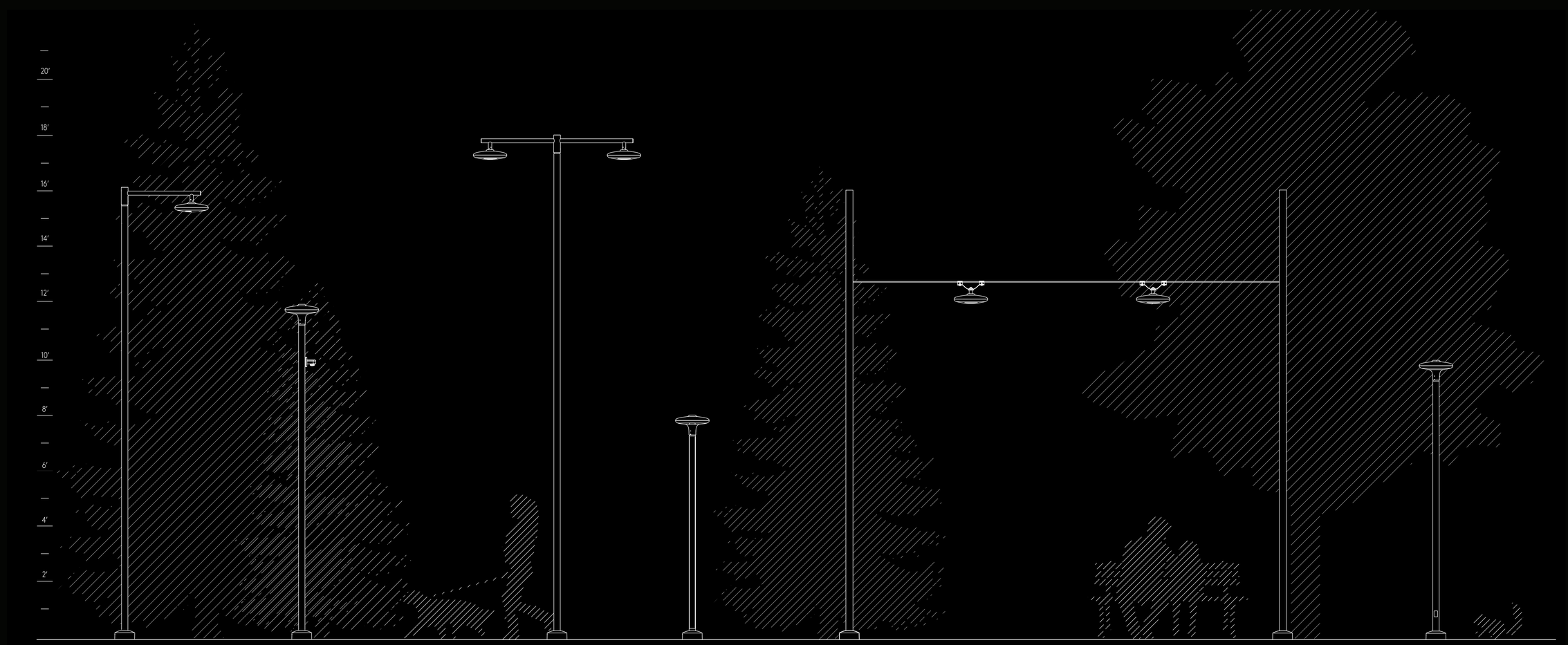




new!



Aya - a family of **mounting choices**



Single Pendant Mount

Post Top with Motion Sensor

Double Pendant Mount

Post Top

Catenary

Post Top with GFCI

Precision Illumination Elevated Design

Introducing the Aya Catenary

Selux Aya Catenary is a refined LED luminaire designed to deliver precise, comfortable illumination for outdoor environments. Suspended elegantly on cables, Aya Catenary directs light exactly where it's needed—enhancing wayfinding while preserving surrounding darkness for a visually balanced and dramatic effect. Its recessed optics minimize glare and ensure DarkSky compliance, protecting night skies and reducing light pollution.

Available with Biological Red technology, Aya Catenary supports healthier nighttime environments by minimizing the impact on human circadian rhythms and local ecosystems—offering both visual comfort and environmental balance.

Selux collaborates closely with designers to engineer tailored Aya Catenary solutions that blend performance, beauty, and environmental responsibility for every project.

Two Pole Mounting Options Infinite Design Possibilities

Aya Post Top Mount

The Aya Post Top Mount is designed for environments that prioritize human-scale lighting and visual comfort. Its vertical form and soft, uniform illumination create inviting spaces where people linger, walk, and gather. Ideal for pedestrian pathways, parks, landscaped areas, campuses, courtyards, waterfront promenades, and civic or mixed-use developments, Aya Post Top provides balanced light that enhances safety while maintaining a calm, welcoming atmosphere.

Aya Pendant Arm Mount

Aya can be mounted on top of a pole, or for a more decorative look, using a lateral arm and pendant-style mounting. With a single arm, you create a more directional lighting, able to offset your distribution from the pole location. Double arms provide twice the lighting with a single pole, minimizing mounting points while maximizing aesthetics.

Light That Respects Life:
Biological Red

Biological Red

Biological Red lighting focuses on maximum protection for nocturnal ecosystems by minimizing blue and green wavelengths that attract and disturb wildlife. Using a red spectrum (630nm) combined with alternating LEDs in warm 2700K creates a luminaire that meets changing needs throughout the night and year.

Combining the red and 2700K White LEDs with dimming, based on the changing needs of the space, balances human visual comfort and safety with ecological protection.

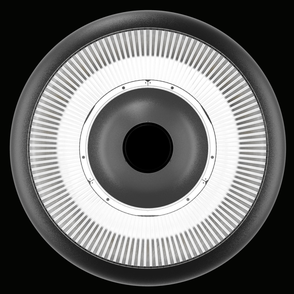
Self-cleaning through rainwater - following nature's example

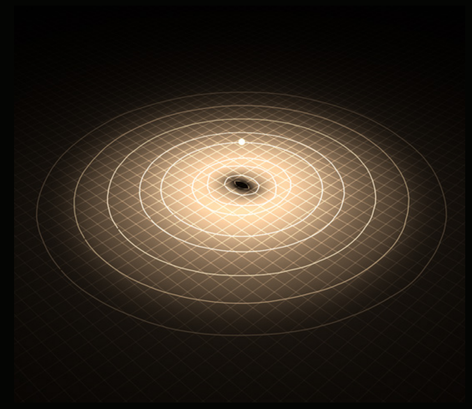
Everything that doesn't work or is unnecessary is filtered out by nature. Following this maxim, Aya's form emerged from its function - with minimal use of materials in order to conserve resources. The silhouette seamlessly integrates into urban and natural spaces thanks to its soft contours.

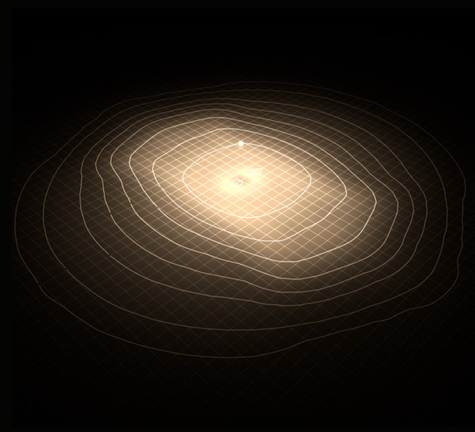
The organic form of Aya allows rainwater to float across the entire luminaire housing, from top to bottom. This not only helps clean the luminaire but also improves the maintenance efficiency.

Precision optics
for visual comfort and greater flexibility

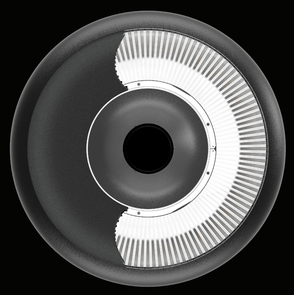
Symmetric

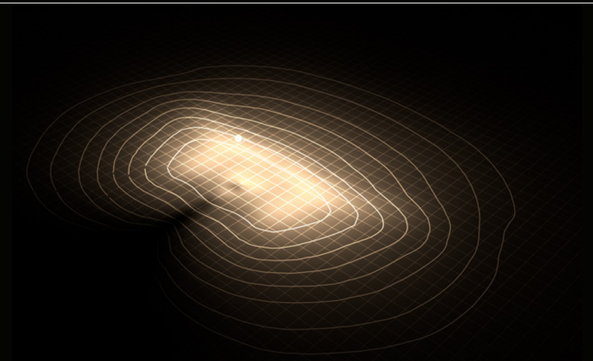






Asymmetric





Up to 7,855lm

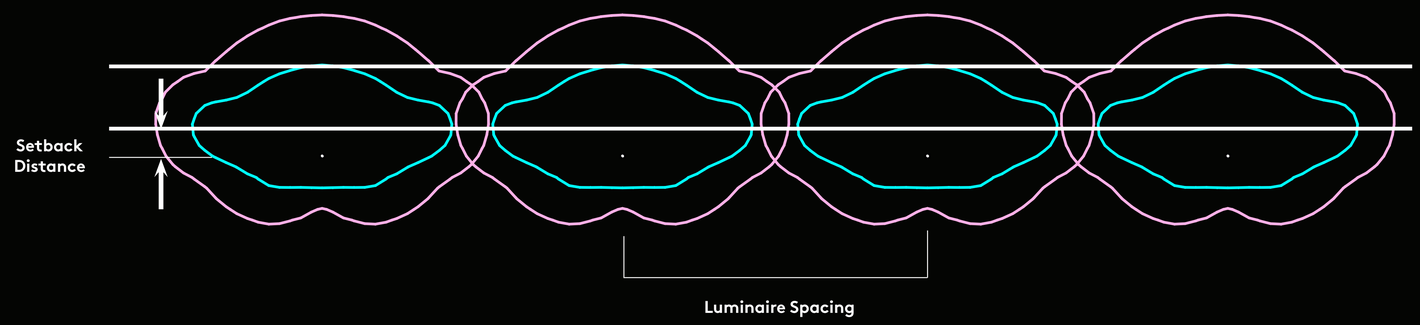
Up to 126lms/W

Specially-designed reflector and lens optics, combined with the luminaire's shape, enable controlled light emission. Depending on the arrangement of the modular optics, the light distribution can be either symmetric or asymmetric. The use of glare shields minimizes excess spill light which protects residential areas and environmental zones from unwanted light.

For a Path 6′ wide 1′ setback		
Illuminance criteria — Avg 1.0 fc, Avg/Min 4, Min 0.1 fc		
	Mounting Height (ft)	Recommended Spacing (ft)
AS-MO	20	111
AS-MO	12	68
AS-HO	20	110
AS-HO	12	65
AS-LO	20	59
AS-LO	12	68
AS-HO-BR (27)	20	60
AS-HO-BR (27)	12	67
AS-LO-BR (27)	20	32
AS-LO-BR (27)	12	53

For a Road 20′ wide 1′ setback		
Illuminance criteria — Avg 0.5 fc, Avg/Min 4, Min 0.1 fc		
	Mounting Height (ft)	Recommended Spacing (ft)
AS-MO	20	114
AS-HO	20	101
AS-HO-BR (27)	20	103

Guidelines for placement. When planning Aya placement, proper spacing helps ensure consistent illumination and visual comfort along your pathway or roadway. Each Aya is designed to perform at a specific mounting height and spacing distance, and following the recommended chart values will help you achieve optimal coverage without dark spots or excessive brightness.



Where **light** meets **comfort**

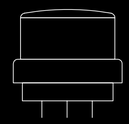
The alluring volume of light inside Aya provides safety and orientation

Guiding Light

Deep-set LEDs, precision optics, and the availability of warm CCTs and Biological Red light engines help Aya meet DarkSky requirements for both commercial and residential. The curvature of the housing encases the outer lens, creating not just an aesthetically-pleasing curve, but preserving the night sky through reducing light pollution.

DarkSky Awards
Lighting Technological Innovation 2025

Smart Features for Every Application

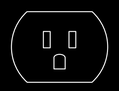


Photocell

The twist-lock photocell conserves energy and improves safety and security by automatically turning lights on when it gets dark. It also saves on energy by turning off at dawn when extra light is unnecessary.

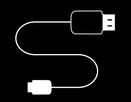
Motion Sensor

Allowing the light to be controlled by a motion sensor cuts down on the amount of wasted electricity. With a motion sensor, the lights will only be on when someone is using the area. This makes sound economic sense, and is more environmentally friendly.



GFCI

The outdoor GFCI duplex receptacle is intended for portable tools and equipment when attended by personnel. It is weatherproof with its self-closing cover - for use with or without padlock.



USB/Duplex Receptacle

The outdoor GFCI receptacle with USB charging port is intended for portable tools and equipment when attended by personnel. The USB charging port allows convenient charging of smart phones or other low voltage electronics.

Walkways and Paths

Aya's sleek lines and reduced profile allow for impactful lighting even in the most intimate settings. Utilize either the symmetric or asymmetric distributions throughout a space, all with the same design language, to create welcoming, comfortable areas for walking and gathering.

Urban Spaces

Plazas and other urban spaces are meant to invite people and give them a place to gather, rest, and connect with others in the community. Appropriate lighting can help establish a lively commune, where people can engage with others and feel at ease.

Aya provides low-glare, welcoming illumination for public spaces, enhancing their allure.

Application with Static White LEDs

Application with Biological Red Light Engine

Declared with Integrity. Trusted by Design.

Our commitment to transparency isn't just a label — it's a promise. Every product is verified, safety-tested, and built reliably in our Highland, NY facility to earn your trust.

Declare

Aya
Declare label for our interior luminaire

Declare is a platform to share and find healthy building products. Manufacturers willingly disclose product information that can be found on the Declare labels. These labels are then accessible on a free and searchable database used by prominent designers, real estate owners and home owners, to specify products they know they can trust and that meet the requirements of leading green building standards, including Core Green Building, LBC, LEED, and WELL Certification.

Declare has positively changed the materials marketplace to enable the creation of buildings that support human and environmental health and has made it extremely easy to facilitate and simplify the exchange of information.

Selux is also proud to be a Living Future Corporate Member. With this credential, Selux is recognized for its proficiency in the world's more ambitious, advanced, and holistic sustainable design standards.

With these credentials, you can trust Aya to deliver reliable, high quality performance with confidence.

Declare℠

Aya
Selux Corporation

Final Assembly: Highland, NY
Life Expectancy: 5+ Year(s)
End of Life Options: Recyclable (90%)

Ingredients:

Aluminum; Cast Aluminum; LED Driver; Carbonic acid, polymer with 4,4′-(1-methylethylidene)bis[phenol]; Cooper; Stainless Steel; RTV silicone rubber; Styrene-butadiene copolymers; Acryl- und Methacrylmodifizierte Polydimethylsiloxane, mittlere Molmassen 1200 bis 15000 g/mol, Restgehalte an AcrylsΣure und Octamethy÷lcyclotetrasiloxan < 0,1 %; Nylon 6/6; Nickel Plated Steel; 18-8 Stainless Steel; Steel

Living Building Challenge Criteria:

I-13 Red List:
☐ LBC Red List Free
☐ LBC Red List Approved
■ Declared

% Disclosed: 100% at 100ppm
VOC Content: Not Applicable

I-10 Interior Performance: Not Applicable
I-14 Responsible Sourcing: Not Applicable

XXX-XXXX
EXP. 01 NOV 2026
Original Issue Date: 20XX

MANUFACTURER RESPONSIBLE FOR LABEL ACCURACY
INTERNATIONAL LIVING FUTURE INSTITUTE™ living-future.org/declare

LIVING FUTURE
CORPORATE MEMBER

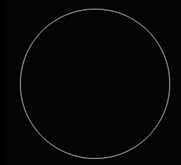
Selux Metal Finishes

Tiger Drylac® powder-coated finishes are available in standard colors. Aya is also available in Premium Colors from the Selux RAL book, or custom colors on a project-specific basis.

WH - White

BK - Glossy Black

BL - Semi-Matte Black



SV - Silver

BZ - Bronze

SP - Premium Color


SPAR
dm

BIOLOGICAL RED

Biological Red

Safeguarding wildlife, plants, and night skies

Recent scientific studies point to a troubling decline in insect populations, with both diversity and abundance falling at rates that threaten ecosystem balance. The reduction in pollinators directly impacts plant reproduction and, by extension, agricultural productivity. At the same time, excessive use of electric lighting—particularly in urban environments—contributes significantly to light pollution, disrupting nocturnal wildlife behavior and obscuring the night sky.

Biological Red technology offers a targeted, research-backed solution for responsible outdoor lighting. Engineered to emit light within the red spectrum, this approach supports healthy plant growth while minimizing disruption to insects, birds, and other nocturnal species. By preserving circadian rhythms and reducing sky-glow, Biological Red aligns with growing demands for DarkSky compliance and ecological sensitivity.

This spectral strategy is especially effective during spring, summer, and fall—key periods for both insect activity and plant development. For lighting professionals seeking to balance performance, aesthetics, and sustainability, Biological Red provides a versatile solution that supports biodiversity, enhances plant vitality, and helps maintain the integrity of nighttime environments.

Fewer Pollinators, Fainter Stars.
How Excessive Lighting Disrupts Nature

Effects on Insects

Insect populations have declined by up to 75% in the past few decades, with serious consequences for ecosystems that rely on them for pollination, decomposition, and as a food source. A key contributor to this decline is electric lighting. Insects often use natural light cues to navigate, but bright, unnatural sources can draw them away from their habitats—a behavior known as the “vacuum effect.” This leads to disorientation, entrapment, or death, disrupting insect life cycles and the food webs they support. Smarter lighting choices can help reduce this impact and protect biodiversity.

Effects on Plants

Though stationary, plants are highly sensitive to light cycles. Many depend on pollinators like bees and bats—species disrupted by electric lighting. Since one-third of food crops rely on these pollinators, this poses a risk to agriculture. Electric light can also disturb plant growth, affecting germination and flowering. In over-lit urban areas, this contributes to reduced plant vitality and biodiversity. Spectrally-tuned lighting, such as red light technology, offers a solution that supports both plant health and nighttime safety.

Effects on Night Sky

Electric lighting has drastically altered the night, washing out stars and disrupting ecosystems. Light pollution now affects nearly 80% of the global population and harms nocturnal species that rely on darkness to feed, move, and reproduce. The loss of natural night impacts insects, birds, and mammals alike. Protecting the night sky is both an ecological and cultural need. Smarter lighting design—reducing blue light, limiting upward spill, and prioritizing darkness—can help restore balance.

What is Biological Red?

Biological Red is an innovative lighting concept that mimics natural light to balance human circadian rhythms and ecological protection.

It prioritizes biodiversity care by using warmer, red-spectrum light instead of bright, disruptive white or blue lights that negatively impact insects and wildlife.

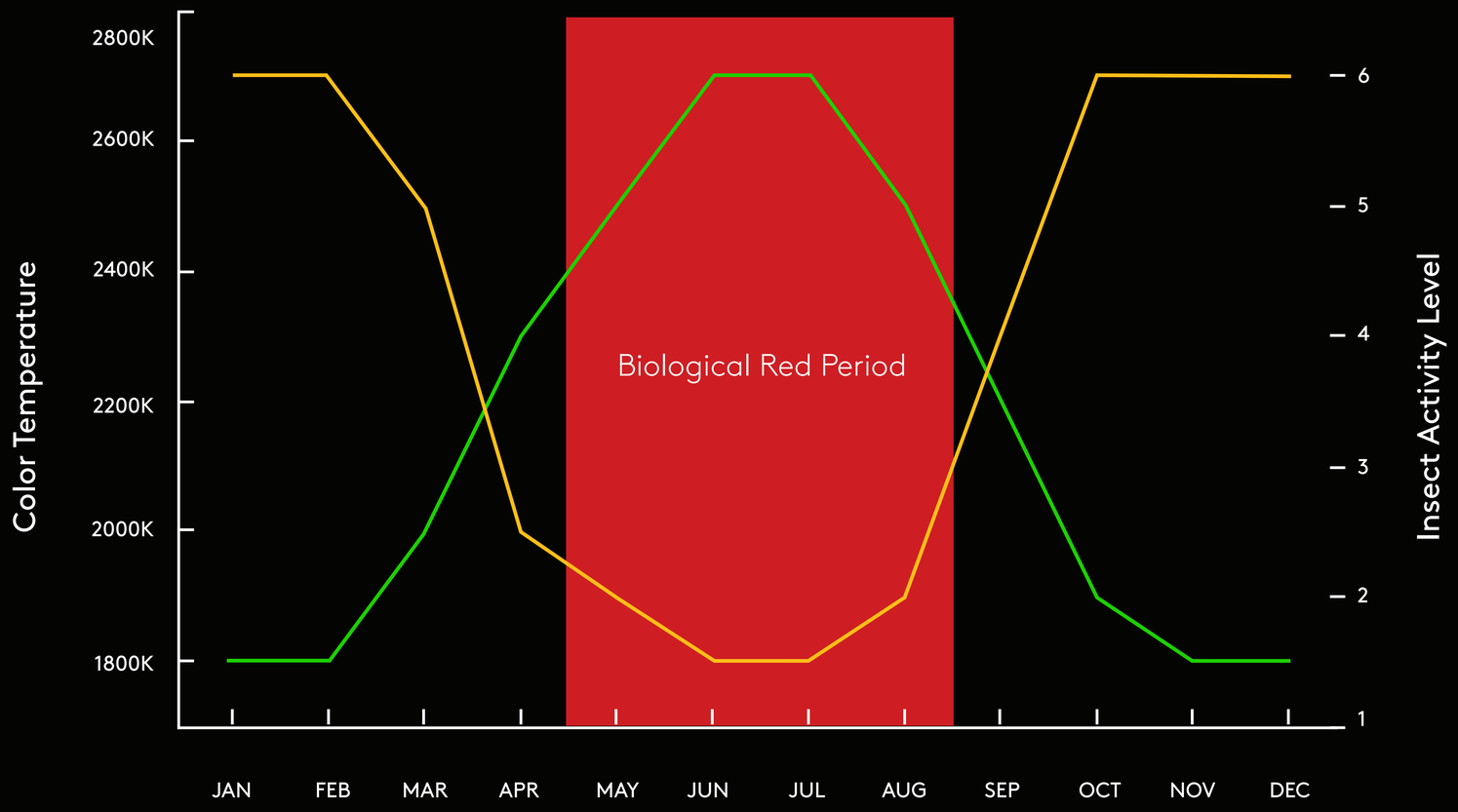
The light color adjusts between the 630nm red spectrum and 2700K, with intensity adapting to insect activity during relevant seasons via third party controls.

For plants, red light activates the phytochrome system, which is essential for healthy growth and development.

To protect ecosystems, it's important to avoid harsh blue and white lighting that causes insect disorientation and ecological disruption.

Using softer, red lighting helps minimize impact on nocturnal species and preserves natural rhythms.

How Light Color Shifts with Insect Activity Through the Year



This chart shows how Biological Red lighting can be adjusted throughout the year to align with insect activity levels. The orange line represents the color temperature (K), which decreases from warm white light in winter (2700K) to deeper red tones (1800–2000K) in spring and summer. The green line tracks insect activity, which rises sharply during the warmer months.

The shaded red area highlights the Biological Red period—from April to August—when red-spectrum lighting is most effective at reducing insect attraction and protecting nocturnal ecosystems. Together, these trends show how lighting can follow nature's rhythm, maintaining visibility for people while minimizing ecological disruption.

Winter

Static White LEDs

In colder months, many nocturnal species are less active or dormant. This is when standard warm white LED lighting can be used more flexibly, balancing visibility and safety while still being mindful of light pollution.

Summer

Biological Red Active

During the warmer months, insect activity is at its highest. Biological Red lighting shifts to a deeper red spectrum to reduce insect attraction and protect nocturnal wildlife. This soft red glow maintains visibility while helping preserve natural ecosystems and the night sky.

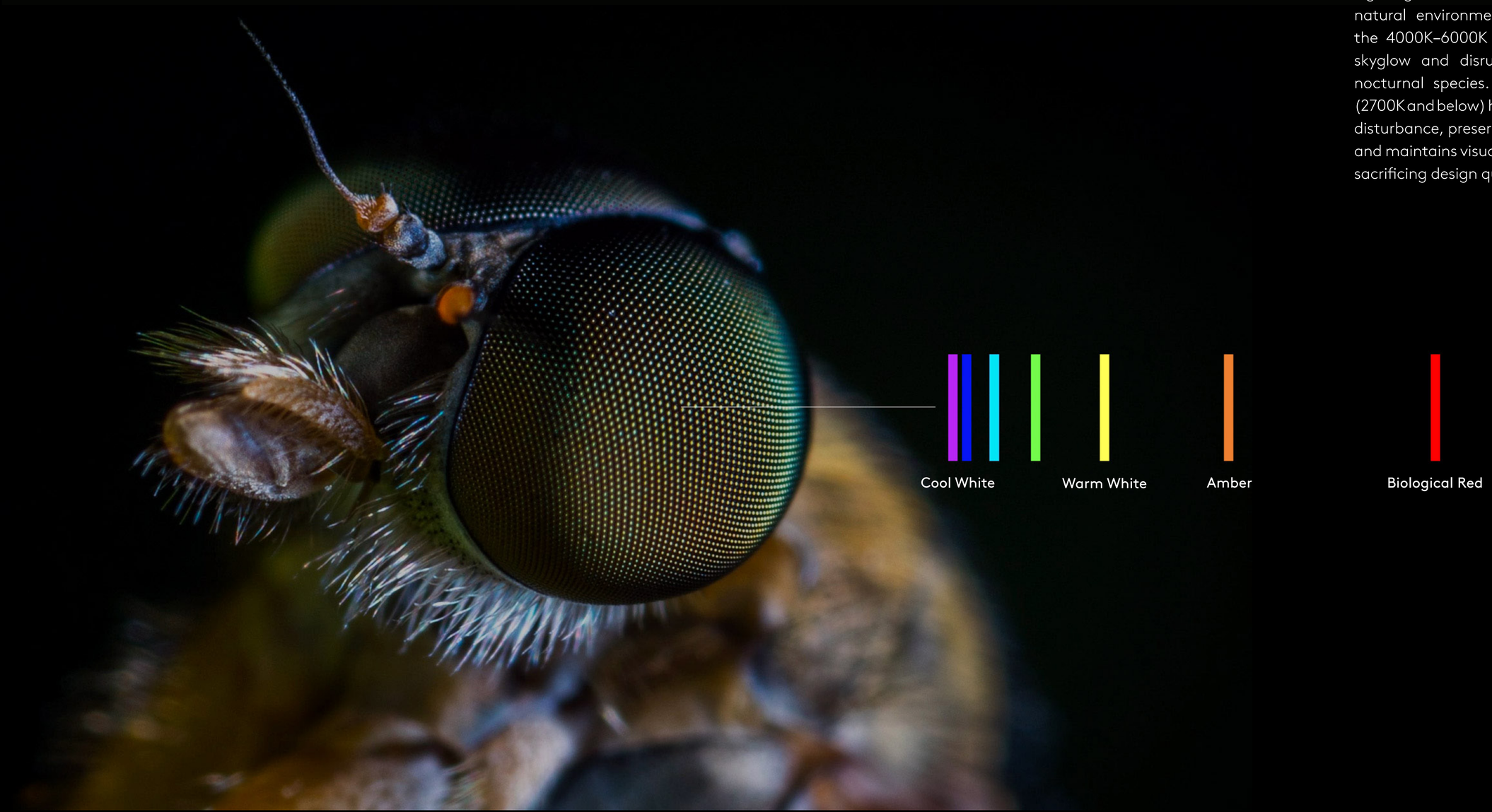
Choose Light That Protects Nature

Not all light colors are equal — the right spectrum makes all the difference

Avoid:
Cool white and blue-toned lights (4000K–6000K). They scatter easily, increase sky-glow, and attract insects away from their habitats.

Choose:
Warm white or red-spectrum light (1800K–2700K). These minimize ecological disruption, protect nocturnal wildlife, and maintain a healthy night sky.

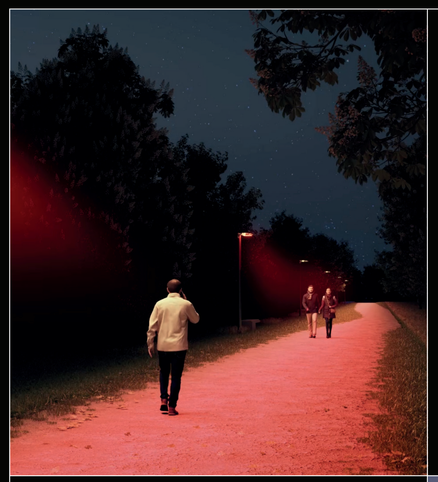
Why it Matters:
Lighting has a direct influence on the natural environment. Blue-rich light in the 4000K–6000K range contributes to skyglow and disrupts the behavior of nocturnal species. Warmer illumination (2700K and below) helps reduce ecological disturbance, preserves darker night skies, and maintains visual comfort—all without sacrificing design quality or performance.



Typical Applications for Biological Red

Bio Red is ideal for environments where protecting nocturnal wildlife and maintaining natural nighttime conditions are priorities. Its red spectrum minimizes disruption to insects, bats, and other nocturnal species while still providing safe, comfortable illumination for people. Typical applications include parks and nature reserves, waterfronts, coastal areas, pathways near habitats, dark-sky parks, observatories, and environmentally sensitive developments.

By reducing blue light emissions, Biological Red supports ecological preservation and enhances the harmony between built spaces and the natural world.



Parks

Waterfront

Pathways

Preservations

Publisher
Selux Corporation
5 Lumen Lane
Highland, NY 12528
www.selux.us

Edited by (responsible)
Selux Corporation

Concept and Design
Selux Corporation
www.selux.us

Print
Selux Corporation
5 Lumen Lane
Highland, NY 12528

January 27, 2026 12:59 PM

BUY AMERICAN · 5 YEAR LED WARRANTY · UNION MADE IBEW LOCAL 363 · ASTM & PCI FINISH · RoHS COMPLIANT · IK08 · IP65 · Declare