

LamLight

Giving light, Structure

The first composite diffusing light. New, composite technology Lamlight was born by combining the textile expertise of Guardtex and the revolutionary works of Structural Composites Inc. Lamlight is a composite that unites Kanvaslight, an illuminating fabric, and Co-Cure, a polymer hybrid resin. Whether you need a functional or aesthetic light for your composite structures, Lamlight is the perfect solution.

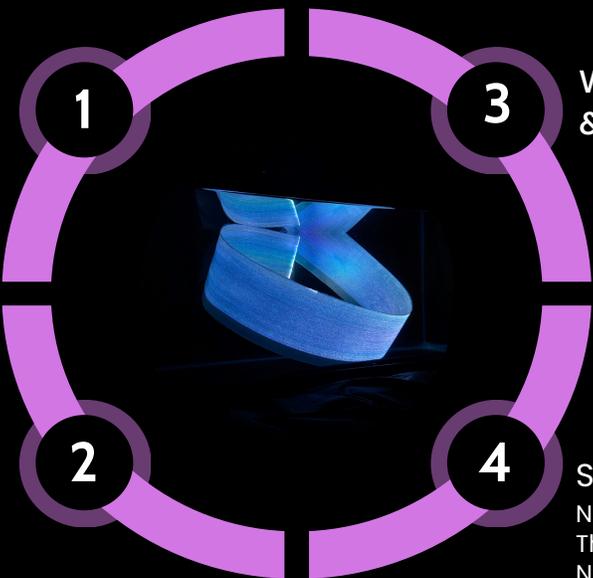


KANVASLIGHT[®]
By  guardtex

With

CoCure[™]

1 FLEXIBLE, RESISTANT & THIN
Composite is only 1mm thick



3 WATERPROOF & UV RESISTANT

2 LOW CONSUMPTION
Less than 10w to operate

4 SAFE
Non-Aggressive Lighting
Thermal Regulation
No electricity flowing through the composite

Overview

By uniting the expertise of Guardtex and Structural Composites Inc., Lamlight uses the revolutionary Co-Cure resin and groundbreaking Kanvaslight Illuminating fabric. Lamlight is a two component system, built with an electronic and a composite. Lamlight uses light transportation to light the composite. By using light transportation, Lamlight is the perfect LED replacement. With the optical fibers woven through out the composite, electricity does not flow through the composite, only the light injector, making Lamlight the ideal lighting solution in terms of safety. Once the electronic is plugged into a power source, the light injector shines a powerful light, diffused by a patented optical coupler, focusing the light into the optical fibers that woven throughout the composite. The optical fibers are treated to allow light to leak out giving you a very uniform and smooth lighting effect.

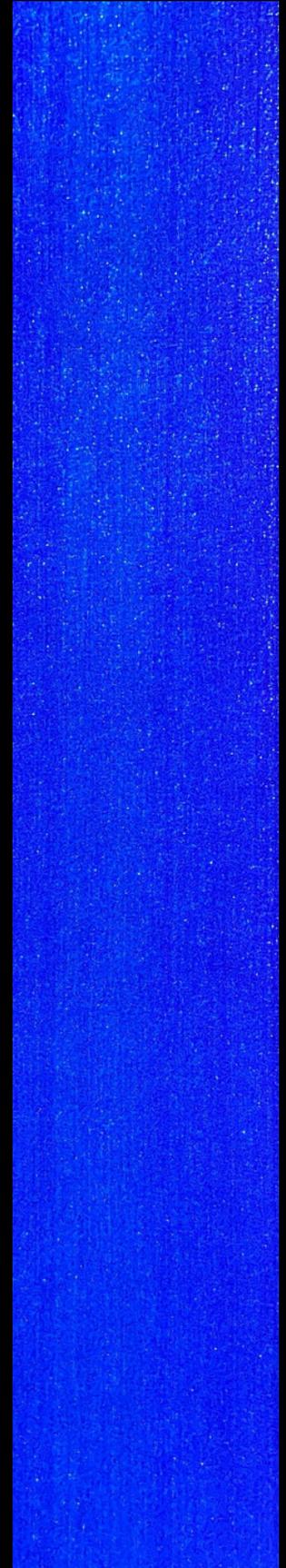


Standard Dimensions

Length (Feet)	Width (Inch)	Extension (Inch)	Luminance (cd/m ²)
4'	1"	6.5"	310
4'	2"	6.5"	190
4'	4"	6.5"	95
8'	1"	6.5"	155
8'	2"	6.5"	95
8'	4"	6.5"	30

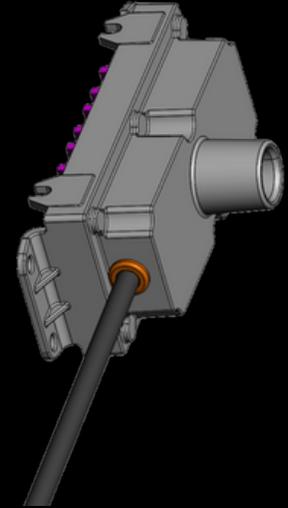
The dimensions are customizable to your projects, please contact us for more information.

Lamlight can be integrated into any composite structure without altering the mechanical makeup of the composite, making it seamlessly added into your manufacturing process with no difficulty. Lamlight is ideal for places such as boat hulls, pools, vehicles, aeronautics, and many other industries.



Electronic - RGBW Light Engine

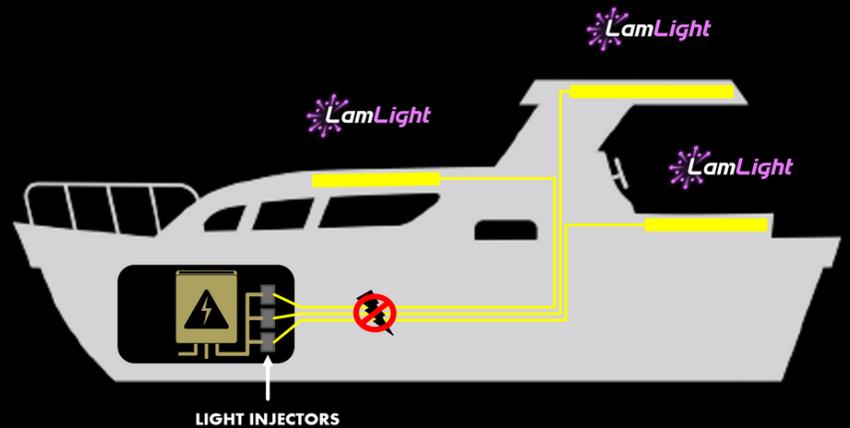
- Full RGBW range with the ability to seamlessly fade between all colors
- Shines a non-aggressive light
- Designed specifically for the illuminating fabric within Lamlight
- Low power consumption
- Utilizes a patented optical coupler (lens) to optimize light projection for the ideal light through the optical fibers
- Waterproof - IP65
- Horizontal and vertical screw mounts
- Modern and sleek design



Product Details

RGBW Light Engine	
Voltage	12VDC
Power	<30W
Dimmable	Yes
Compatible Controllers	NMEA 2000 - J1939 & others
Dimensions	50x101x76mm 2"x4"x3"
Casing	Polycarbonate
Weight	260g
Light Injection	1

Optical Wires



Centralize all the light injectors in one area using optical wires. To integrate the electronic device further away from the illuminating composite, we developed optical wires made to transport the light between the light injector and the composite with minimum light losses. No electricity flows into the optical wires, only light. The Optical wire allows all the electricity to be in one specified electrical location, and the lighting composite can be placed wherever light is needed.

Co-Cure

Co-Cure is a resin that is a hybrid of polyurethane flexible network and UPR rigid cured network. As a resin, Co-Cure is highly compatible with Kanvaslight illuminating fabric, making the Lamlight composite. Co-Cure provides the best light transmission ratio while also keeping the composite flexible and resistant. With Co-Cure, a boat manufacturer can reduce the weight of the boat while improving its mechanical performance. As a resin for composites, Co-Cure can double the life expectancy of products.



90% IMPROVEMENT FOR GLOSS AND GLASS RETENTION



40% IMPROVEMENT ON ABRASION RESISTANCE



100% IMPROVEMENT IN IMPACT RESISTANCE



COCURE WAS SELECTED BY THE U.S. NAVY FOR THEIR ADVANCED COMBAT CRAFTS.

Engineering Expertise

Between Guardtex and Structural Composites Inc., we have expertise in many different engineering fields. Because of the multitude of experts, we are able to assist you with a variety of custom projects. We can assist with electronics, composite integration, process adaptation, industrialization, and of course we can provide customization and design suggestions. Contact us for more information and with your potential projects.



Custom Design

Do you want customized dimensions? Do you want to add your logo into a composite? If you are looking for specific designs, contact us!

We offer pre-made designs but are able to incorporate any logo/design that you would like.

