

OLEDWorks Automotive Lighting Solutions

We are uniquely positioned to produce the next generation of OLED automotive lighting.

We built the first OLED light qualified for automotive, meeting ECE/SAE color regulations, and automotive performance requirements. It is a deep red for tail light applications, which enables high luminance at a long lifetime, even at elevated temperatures.

In addition to red, rigid technology platforms are also in development and include amber OLED, white OLED, and more in automotive-grade flexible configurations.

Manufacturing Quality and Capabilities

Using the lean principle in our Aachen, Germany facility, high volume production is manufactured and essential to the production system. Comprehensive quality control, reporting, and industrial MES systems are all supported by our in-house environmental test lab and equipment, which lead to product reliability for companies like Audi.



 **OLEDWorks**



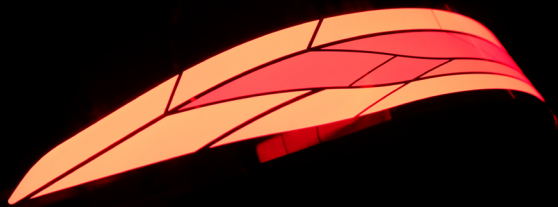
Unique Design Possibilities

Our technology enables innovative and distinct light designs and patterns that can reinforce a brand.

OLED lighting is a surface light source and has been used for brand differentiation in the automotive industry for years. OLEDWorks is collaborating with innovative car manufacturers and Tier 1 suppliers to utilize the benefits of OLED light to increase safety on the road and energize the consumer experience.

Our partners estimate that replacing LED technology in the taillight with OLED technology would result in:

- 80% space reduction
- 50% reduction in taillight weight
- 25% reduction in overall cost



Unmatched Uniformity

Brightness and color uniformity convey elegance, quality and simplicity in design. OLED lighting has incomparable uniformity, naturally, without waveguides or optics. This superior performance holds true at all brightness levels, within OLED elements and across multiple panels.

Lightweight and Ultra-thin

Using OLED technology can reduce a vehicle's overall fuel consumption because OLED lighting measures less than 1mm in thickness, and remains so when integrated into lighting modules. Fewer parts facilitate a simplified supply chain. Thinner parts enable more usable space for consumers.

Intrinsic Segmentation

OLED light panels can be designed to have multiple, individually addressable segments providing high contrast ratio between segments without crosstalk. This is achieved within the panel design and does not diminish the thinness, uniformity or quality of the light.

Key Communication

Car-to-X Communication is becoming a more important element in rear combination lamps in automotive vehicles. Drivers benefit if they have a better understanding of what is happening on the road. OLED lighting is the perfect solution for this.

Unhindered Reliability

OLEDWorks red taillight panels have undergone and passed extensive automotive reliability testing, following guidance from AEC-Q-102 standards.

Tests include:

- High temperature & humidity storage and performance (up to 85°C/85%RH)
- Low temperature operation (down to -40°C)
- High temperature storage and operation (up to 105°C)
- Thermal shock (down to -40°C and up to 85°C)
- Mechanical shock and vibration

Learn more at [OLEDWorks.com](https://oledworks.com)

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