



Revolutionizing Color Evaluation for Brands and Supply Chains with X-Rite's LED Light Booth

With fluorescent bans going into effect, industries such as apparel, footwear, automotive, consumer packaged goods, building materials, consumer electronics, and more face an urgent need to adapt to more sustainable lighting technologies. Brands, suppliers, and manufacturers must transition to energy-efficient, high-performance LED solutions to maintain consistency across materials and comply with government restrictions.

Challenges

Using fluorescent technology in light booths poses many challenges for brands and suppliers:

- Fluorescent lamps require warm-up time which slows down visual evaluations.
- Fluorescent lamps don't have great homogeneity and light diffusion which can impact accuracy of color evaluation.
- Variations in color between suppliers can be difficult to detect without precise, consistent lighting, impacting final product quality.
- Fluorescent lighting is inefficient and contributes to a higher environmental footprint.
- Government bans on fluorescent lighting are forcing a shift to LED technology to remain compliant.

Solution

A reliable, accurate LED light source is essential to uphold consistency with previous fluorescent-based evaluations. X-Rite's Judge LED light booth provides an advanced, future-proof solution for businesses transitioning from fluorescent to LED lighting by offering:

- **Multiple Light Sources:** Including daylight with and without UV content, UV standalone, and LED sources, replicating both new and former spectral power distributions.
- **Enhanced Surface Defect Detection:** X-Rite's LED technology, including directional D65 lighting, enhances the ability to assess texture and surface defects, improving overall quality control.
- **Global Standards Compliance:** Meets stringent color evaluation standards such as ISO 23603, ISO 3664, AATCC EP9, ASTM D1729, and others, ensuring uniformity across global supply chains.
- **Instant-On LED Performance:** Eliminates the need for warm-up time, providing immediate readiness for color assessments.
- **Convenient Buttons:** Features physical buttons to change illuminants so the operator can focus 100% on looking at the sample rather than the touch screen.
- **Cost and Energy Efficiency:** LEDs offer a longer lifespan than fluorescent lights and consume less energy, reducing both maintenance costs and environmental impact.
- **Sustainability:** By transitioning to LED, brands can reduce energy consumption and eliminate the hazardous materials present in fluorescent lighting.

Results

- Provides a smooth transition from fluorescent to LED technology
- Replicates former fluorescent spectra, reducing variations in evaluation
- Instant-on functionality eliminates fluorescent warm-up time and reduces overall evaluation time
- Directional D65 lighting improves texture and defect detection, enhancing product quality
- Reduces energy use and operating costs
- Requires fewer bulb replacements for energy saving initiatives



How it Works

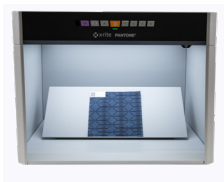
Judge LED has been designed and developed around the customer, with a very user-friendly interface and plug and play approach. To use the system, you only need to follow 3 steps:

1. Once the system is installed on your desk or table, switch on the main switch at the rear of the instrument.
2. Press the ON/OFF button at the front side of the luminaire. The LED status under the button will immediately indicate the system is ready with a green LED.
3. Press the button for the illuminant you want to use and enjoy instant warm-up to begin your color evaluation.

Conclusion

X-Rite's Judge LED light booth offers a future-proof solution that enables brands and supply chains to transition from fluorescent to LED, comply with government restrictions, improve operational efficiency, and reduce energy costs.

Featured Product



Judge LED

The Judge LED Light Booth is an eco-friendly, LED color evaluation tool that offers 7 different light sources, instant warm-up and consistent lighting to ensure accurate evaluations across the supply chain.