

# UL Marketing Claim Verification

## Low optical flicker

**In today's global market, customers may encounter issues understanding which product claims are accurate. Providing customers with a reason to trust a claim can make all the difference.**

### UL Verified Mark

UL provides brands with a powerful, independent tool for building consumer trust and more ownable label claims—the UL Verified Mark.

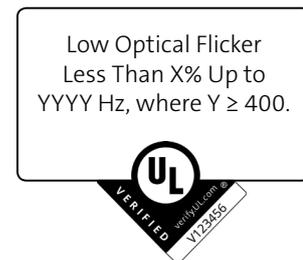
By leveraging UL's respected background as a safety science leader, the UL Verified Mark helps brands verify product claims against accepted industry standards—or through bespoke methodology developed specifically for a claim or product.

### UL Verification for Low Optical Flicker

Flicker is a well-known issue in the lighting industry and the challenges associated with it have caused some energy efficiency programs and local governments to include flicker requirements. While there are some localized requirements, international testing methods and/or specific standards have not been fully developed to address this problem. As issues with flicker become better understood, more lighting requirements are likely to add limitations to the amount of flicker that a light source or luminaire can produce.

UL's photometric experts are familiar with standard methods of flicker testing and are actively involved in the development of lighting measurement test methods. With this existing expertise, UL developed a testing method that provides information on the percentage of optical light flicker in a product. The UL Verified Mark demonstrates that the product has been tested and evaluated for flicker performance with particular reference to the percentage of optical flicker present in the product.

The test method was developed to test performance for dimming and non-dimming products, and the results are compared to existing knowledge on flicker performance. This information allows us to verify flicker claims and, if the claims are found accurate, authorize brands to market their products using the UL Verified Mark. Most important, the Mark allows end-users to make informed decisions about where a light can be used to minimize the risk of flicker issues.



### Understanding optical flicker

Flicker is present, to some degree, in nearly all light sources; however, the degree in which flicker can be perceived, or is considered acceptable, varies depending on the amount of variation present and the frequency at which the variation occurs. This presents a challenge with LED products (and many discharge products) as the technology has a low light persistence, meaning LEDs react quickly to changes in current, increasing the potential for the frequency components found in line voltage and the driver circuitry to be converted into adverse visual effects.



## Why UL?

Our specialized lighting engineers have the expertise and state-of-the-art testing capabilities for neutral, third-party assessment of flicker performance.

UL continues to work with the global lighting community in an effort to increase understanding, improve testing and help ensure the safety of those using artificial light.

Wherever you are and whatever your target market, UL possesses the global reach and local service to help you achieve your certification goals. As you prepare to go to market with your lighting products, partner with us for thoughtful, reliable solutions and an expert team of lighting engineers who are easy to work with.



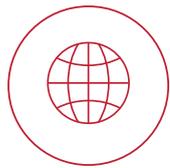
Safety



Energy efficiency



Performance



Global Market Access



Connected lighting solutions

Visit us online to learn more about UL Marketing Claim Verification for lighting products, or contact your regional team for a quote.

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