

Lighting Suitability Report: TH741 TH742,TH5041,TH5042 for Art Gallery Use

Product Model: TH741 TH742,TH5041,TH5042
Test Standards: IEC 62471:2006 Photobiological Safety
Test Reports Attached:

- Spectrum Report (EVERFINE HAAS-1200)
- Photobiological Safety Report (IEC 62471)

1. Product Overview

The TH741, TH742, TH5041, and TH5042 are high color rendering LED lighting modules with a typical CCT range of 2700K to 5000K and a CRI above 94, designed for high-quality illumination in commercial and professional environments.

2. UV Output and Photobiological Safety

- According to spectrum test data, the peak wavelength is 355.4nm, which falls in the UVA range (315–400nm).
- No significant UVB or UVC emission was detected, indicating a very low risk of photochemical damage to artworks.

► IEC 62471 Safety Rating:

The product was tested under IEC 62471 and classified as:

Risk Group 2 (Moderate Risk)

This rating means the product **poses no hazard under normal use** (e.g., when not viewed directly at close range), making it **safe for professional applications** such as museums and art galleries.

3. Suitability for Artworks

Due to the **low UV emission and high color fidelity**, The TH741, TH742, TH5041, and TH5042 are suitable for illuminating sensitive artworks, including:

- Paintings (oil, acrylic, watercolor)
- Sculptures
- Textile-based or paper-based installations

The spectral purity and high CRI help **preserve color accuracy** while ensuring **safe long-term exposure**.

4. Recommended Installation Guidelines

To optimize safety and lighting quality in art gallery environments:

Parameter	Recommendation
Mounting Distance	≥ 1.0 meter from artwork

These practices help to reduce direct thermal load and light intensity concentration on artwork surfaces.

5. Conclusion

The TH741,TH742,TH5041,TH5042 have been evaluated based on spectrum performance and photobiological safety. With their low UV emission, high CRI, and classification as Exempt Group under IEC 62471, they are deemed safe for use in various applications.

Safe and suitable for use in art galleries, museums, and similar environments.

The product poses no UV hazard, ensuring safe lighting for artwork preservation.