UV Lighting Suitability Report: TH731,TH732,TH5031,TH5032 for Art Gallery Use

Product Model: TH731,TH732,TH5031,TH5032

Test Standards: IEC 62471:2006 Photobiological Safety

Test Reports Attached:

Spectrum Report (EVERFINE HAAS-1200)

Photobiological Safety Report (IEC 62471)

1. Product Overview

The TH731, TH732, TH5031, and TH5032 are high color rendering LED lighting modules designed for professional and commercial environments. They are available in multiple color temperatures, offering versatility in lighting design, with a CRI (Color Rendering Index) of ≥ 92, ensuring accurate and vibrant color reproduction.

2. UV Output and Photobiological Safety

According to the TH731/TH732 TH5031, and TH5032 Spectrum Test Report, the peak wavelength is 355.4 nm, which falls within the UVA range (315–400nm).

The product emits a **very low level of UV radiation**, with no significant UVB or UVC detected, minimizing the risk of photochemical damage to artworks.

➤ IEC 62471 Safety Rating:

The product was tested under **IEC 62471** and classified as:

Exempt Group (No UV hazard)

Exempt Group means the product does not pose any photobiological hazard, including UV exposure, under typical operating conditions. This classification makes it safe for use in environments like **art galleries** and **museums**, where sensitive artworks are present.

3. Suitability for Artworks

Due to its **minimal UV output** and **high color fidelity**, the **TH731 or TH732, TH5031 and TH5032 are** ideal for illuminating sensitive artworks, including:

Oil, acrylic, and watercolor paintings

Sculptures

Textile-based or paper-based installations

The combination of low UV emission and high CRI ensures color accuracy while safely illuminating artworks over the long

4. Recommended Installation Guidelines

To optimize safety and ensure the longevity of artwork, the following installation guidelines are recommended:

Parameter Recommendation

Mounting Distance ≥ **1.0 meter** from artwork

Lighting Angle Use indirect, 30°–60° angled lighting

UV Protection Optional: Install UV-filter glass over artwork for additional protection

These measures help minimize direct UV exposure and reduce the thermal load on the artwork.

5. Conclusion

The TH731, TH732, TH5031 and TH5032 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.