Navigating certifications with Christie LED solutions

Certification basics

Every country or region has a set of requirements for the safety, electronic emissions, and hazardous substances of electronic devices. Products are certified with testing in authorized, third-party labs to determine whether they can be used for commercial or residential use.

Certifications can vary greatly across different countries, which can make LED requirements confusing for purchasers. Before purchasing a product, check your governmental and local requirements. To ensure a product meets certifications, look for the identifying mark on the license label and ask for more information about the certification process. In some instances, labels are used inappropriately, so it's important you know that the manufacturer is committed to upholding certification standards.

UL certifications: component- vs. system-level safety

In a component-level UL test, each individual piece of the system (power supply, receiver card, etc.) has passed its required certification testing. Many suppliers stop with this step. However, when LED components are used together, their interactions can cause additional safety concerns. Completing a system-level certification ensures that the entire system is safe.

If an LED product is purchased and installed without a systemlevel certification, you could be forced to provide additional tests. For example, a building owner could request a Field Evaluated Product Mark, requiring that UL conducts extra tests in the field, creating additional costs and project delays.



Each Christie LED solution is UL60950 certified. This is a system-level certification: our solution components have been tested together and meet the most stringent safety and environmental requirements.

Electromagnetic compatibility (EMC)

Some electrical products unintentionally release electromagnetic energy, causing harmful interference or physical damage to other equipment. EMC tests identify and correct these emissions.

EMC has two main components. Emission tests identify whether a LED product releases electromagnetic energy into the environment. They study these unwanted emissions and how to counterbalance them. Susceptibility tests study how emissions affect other equipment, and how to protect it.

Manufacturers are responsible for disclosing EMC information, but it's possible to make a LED product's EMC look more positive than it is. For example, a manufacturer can place a single LED tile, with no controller, into an EMC chamber to show an "operating" tile. The results may show a pass for EMC requirements, but emissions from the controller could be missed. Before purchasing, ask your manufacturer about their EMC testing details.



Restriction of Hazardous Substances (RoHS)

The Restriction of Hazardous Substances Directive regulates the use of six hazardous materials in electronic equipment. Adopted in the European Union, the RoHS Directive is regionspecific. However, many regions in North America follow similar standards. Before purchasing a LED product, buyers must confirm their governmental and local requirements, and ensure the product meets those laws. For example, the State of California and LEED certified buildings may require RoHS certification.

To ensure your standards are met, ask your supplier about the substances used in their products. In some cases, the components will meet environmental standards, but the manufacturing process won't. It's important to know your supplier, and their commitment to upholding best practices.

To satisfy the needs of our partners, Christie® offers full, system-level certification that includes testing of:

- > the entire LED tile, with all its components
- > the controller
- > remote power supply
- > and all field and signal cabling.

Our validation process gives you peace of mind, and eliminates unexpected project costs. Christie goes beyond what is offered by most other LED manufacturers, freeing you from any additional certifications specific to LED displays, including field evaluations. Our components are sold globally and carry the compliance requirements for safety, EMC, and RoHS across many countries and regions.

To learn more about our LED products, and their certifications, contact your Christie representative.

Contact us 🗖

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