



TECHNICAL STATEMENT

LUMINAIRE FIRE SAFETY UNDER FAULT CONDITIONS

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TECHNICAL STATEMENT

TESTING TO APPROVED STANDARDS

When we talk about fire safety in lighting, it's important to be clear about what is actually being assessed and how.

For luminaires, the relevant product standards, including EN 60598-1, define specific tests and constructional requirements to limit the risk of fire, where parts of the luminaire are required to have a defined resistance to flammability test depending on the potential hazard.

Specifically, components used inside a luminaire (e.g. electronic control gear) must be tested to ensure that they cannot create a fire hazard under any normal, abnormal, and fault conditions. Parts of a luminaire protecting or holding live parts, and parts spaced close to heated parts (e.g. lamps), must pass a 650°C glow wire test or needle flame test as directed by the standard. The conditions for these tests and their compliance requirements are precisely detailed.

These tests are carried out under controlled laboratory conditions, using defined temperatures, durations, and acceptance criteria, with appropriate safety measures in place.

DRAWBACKS OF NON-STANDARD TESTING

What's important to understand is that an open or naked-flame application to a finished luminaire does not form part of the standard and is not a recognised way of assessing compliance or safety. The application of a naked flame to the exterior of a luminaire does not replicate any failure condition associated with a luminaire.

Attempting to replicate 'tests' outside of a laboratory environment can present real safety risks to the person(s) and company(s) carrying them out.

Correct testing, carried out to recognised standards, is what underpins product regulatory compliance and confidence across the supply chain.

If there are questions around fire performance or testing, these should always be directed to competent laboratories or certification bodies, rather than improvised methods.



TECHNICAL STATEMENT

VALIDATED SAFETY

It should be remembered that products that are CE/UKCA marked and have a valid technical file to justify this marking, have the right to be placed on the GB and EU markets. Individuals and/or companies who publicly challenge this right, without appropriate evidence, are advised to consider carefully their own legal position before acting. If there are genuine concerns of lighting product safety in the market, then we urge that in the first instance, these concerns are brought to the attention of LIA.

For the highest confidence of safety, selection of a product having a full third-party certification (e.g. ENEC Mark) should be selected. Such a certification ensures both the conformity of the product and the consistency of the manufacturing process, including the quality of the used materials.

