



Life-Safety, Large-Scale Thermal Imaging Project

Innovation to identify & repair safety issues.

EXECUTIVE SUMMARY

When their track lighting began to cause massive life-safety issues, a nationwide specialty retailer chose Loeb Electric to assess and repair the track lighting systems. Loeb developed a process and invested in technology to execute the job without disrupting stores. Time was critical, both from a safety and cost perspective, and in the first year alone, Loeb repaired over 2,000 systems.

THE CHALLENGE

A specialty retailer noticed consistent, life-safety issues with multiple track lighting systems across their nationwide network of stores. These issues included burn marks and falling embers caused by arching, large gaps in connectors, and improperly installed track components. Not only was this an issue of failing products and store closures, but there were life-safety issues that needed to be identified and remediated quickly.

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LOEB PROJECT SUMMARY*

- Locations serviced:
..... approx. **5,500**
- Connection points analyzed:
..... **500,000+**
- Critical issues identified:
..... **22,000+**

** Stats from 2017–2020*

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THE SOLUTION

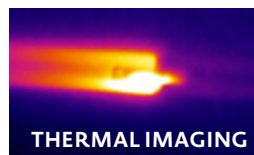
After completing site visits, Loeb identified a Fluke thermal camera to be the best product for the job, ensuring customers' in-store experience was not disrupted, while allowing for easy data capture and thermal images from the ground level.

With no industry standard for IR scanning of track lighting systems, Loeb partnered with an electrical engineering firm to develop a quantitative-based protocol to specifically address track lighting systems. With a measurable protocol in place, Loeb developed a scope of work including a thorough visual assessment of lighting and electrical components, as well as thermal image readings of all track connection points.

Visual Assessment Audits

Most track and track component issues can be identified through a detailed visual assessment. Loeb service technicians began by documenting any differences between the customer-provided store drawings and the actual store track lighting configurations. The technicians then performed a thorough inspection of all track fitting connection points that included:

- visible installation issues;
- life-safety concerns, such as burn marks; and
- non-electrical safety issues (excessive dust, water leaks, corrosion, etc.)



Thermal Imaging

The most concerning were the underlining life-safety issues which cannot be seen. At the same time as the visual assessment, thermal images—as well as regular pictures—were taken of each connection point to identify these potential risks and Loeb has over 25 Certified Thermographers who were ready to assess them.

Inspection Reports & Repairs

After the visual assessment and thermal imaging was complete, Loeb compiled an inspection report for each location that included the data and a remediation proposal. Once the remediations were approved, Loeb worked with a qualified, nationwide network of licensed electrical contractors to make the repairs.

CONCLUSION

The visual assessment and infrared thermography, in conjunction with proper remediation, eliminated all blowouts and fires related to track lighting systems for this retailer.

Although the specialty retailer came to Loeb with critical, reactive maintenance needs, what became clear was a need for a continuous preventative maintenance program to avoid future life-safety risks. Loeb created a yearly preventative maintenance plan that is currently being implemented. A portion of this includes a Loeb Certified Thermographer assessing new construction and remodel projects as an extra assurance of proper installation and code compliance of lighting. They also assess panelboards, switchboards, and switchgear.

Loeb is focused on being a comprehensive solutions provider.
Let's discuss how we can meet your needs.

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