

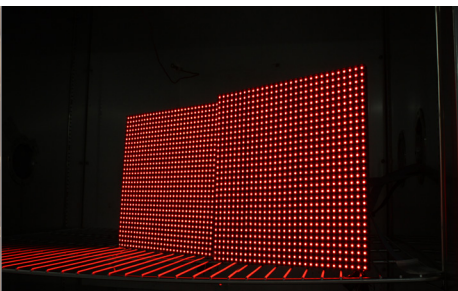


ENVIRONMENTAL SIMULATOR

Display-level environmental testing

While module-level testing provides crucial information on individual component performance, Daktronics understands the big picture of what harsh conditions can do to the entire display. To assure that our displays are as tough as their components, Daktronics technicians use a massive environmental chamber to put entire video boards through a variety of stress tests before product release.

With more than 4,550 cubic feet (128.8 cubic meters) of enclosed testing space, the chamber uses powerful heat lamps, massive cooling fans and an adjustable humidity simulator to mimic a variety of different environments, pushing displays to their absolute limits while ultimately assuring a high-performance product engineered to perform in a variety of uninviting conditions.



CLIMATE CHAMBER

Testing individual components against cold, heat, and humidity.

For component-level environmental testing, Daktronics technicians use a climate chamber to analyze component performance levels under a variety of extreme climatic conditions.

From varying temperatures spanning between a frigid -80°C (-112°F) to a blistering 170°C (338°F) to sweltering humidity levels of up to 95 percent RH (relative humidity), the climate chamber puts each new Daktronics product through a series of punishing environmental tests before product release, providing valuable data to help aid continued component improvements.



THE DAKTRONICS PRODUCT RELIABILITY LAB

Taking environmental testing to bold new heights.

Why do industry experts recognize Daktronics as the indisputable leader in display technology? Simple. Daktronics engineers put as much craft and effort into testing their products as they do designing them.

As part of a continuing tradition of excellence in communications technology, Daktronics opened a state-of-the-art product reliability laboratory that uses the latest advancements in environmental technology to test the limits of every Daktronics product, providing valuable feedback during the product development life cycle.

From punishing salt and fog chambers that exaggerate the corrosive effects of coastal precipitation to blistering environmental simulators that mimic extreme climate changes, our dedicated product reliability technicians push each Daktronics product to its absolute performance limits, using their findings to implement continued product improvements and ultimately resulting in superior products that are built to perform for years to come.

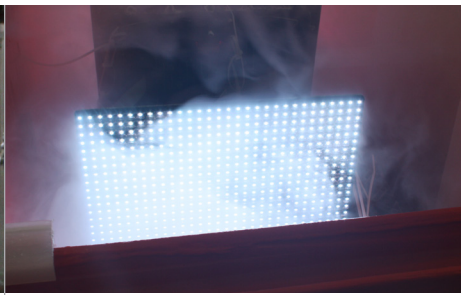


THERMAL SHOCK CHAMBER

Prolonged exposure to extreme temperatures.

While exaggerated climate testing provides valuable data on product performance, Daktronics technicians do not overlook the grueling effects of long-term temperature shock.

Using three isolated chambers (two hot and one cold), the lab's thermal shock chamber alternates product components between extreme heat (200° C, 392° F) and intense cold (-73° C, -99.4° F) for periods of up to a month, providing valuable insight into a component's capacity to handle prolonged temperature extremes.

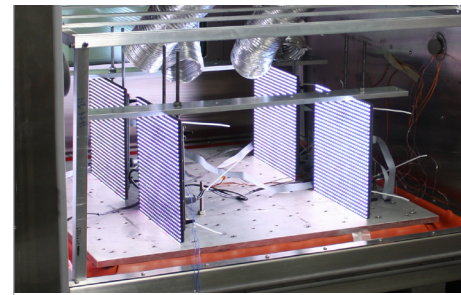


SALT FOG CHAMBER

Measuring the corrosive effects of salty precipitation.

While extreme temperatures shifts and intense humidity can meddle with a product's long-term performance, prolonged exposure to salty coastal air can cause just as much trouble, promoting corrosion within unprotected components.

The Salt Fog Chamber allows lab technicians to punish Daktronics products with a 5 percent salt solution at a sweltering 35° C (95° F) to measure a component's capacity to withstand the corrosive effects of salty coastal air deposited through cooling fans and ventilation devices.



HIGHLY ACCELERATED LIFE TESTING (HALT) CHAMBER

The next generation in environmental testing

The most advanced testing unit of its kind, the lab's HALT Chamber uses a punishing combination of extreme temperature changes and intense mechanical vibrations to stress a product to complete failure, providing valuable insight into a product's estimated lifetime.

Brash temperatures shifts between -110° C (-166° F) and 200° C (392° F) challenge a component's ability to handle harsh climate changes, while menacing mechanical vibrations at rates of up to 5,000 Hz literally push components to their absolute breaking point.

Test results provide our technicians a detailed portrait of a product's vulnerable areas, allowing our engineers to implement continued improvements throughout the product development cycle.



IP VALIDATION (WATER/DUST)

Cabinet Testing For a Weather-Ready Solution

To assure that Daktronics products can hold tough against even the harshest weather, reliability lab technicians perform IP (Ingress Protection) testing to assure proper defense against water and dust intrusion.

Using high-pressure water jets, reliability lab technicians drench entire display enclosures with up to 100 liters (26 gallons) of water per minute from multiple angles to make sure that moisture cannot and will not interfere with critical components.

Supplemental dust testing places products in an airtight enclosure, using a high-power vacuum to help gauge and avert dust penetration. These procedures, combined with the experience gained over thousands of display installations across the world, position Daktronics products among the most reliable and consistent in the industry.