



Leotek is committed to developing emerging solid-state technology that offers greater longevity and environmental viability than traditional lighting sources, while reducing energy consumption and maintenance costs. With an emphasis on providing LED products of the highest quality, Leotek offers the capability to perform certain test procedures in-house.

High Temperature Burn-In Oven



Burn-in is an electrical stress test that employs voltage and temperature to accelerate the electrical failure of a device. Burn-in essentially simulates the operating life of the device, since the electrical excitation applied during burn-in may mirror the worst-case bias that the device will be subjected to in the course of its useable life.

Thermal Shock Test Chamber



Thermal Shock Chambers make it possible to automatically and repeatedly transfer a test item from a hot environment to a cold environment or from a cold environment to a hot environment. This process is defined as true thermal shock and it is different from thermal cycling, where the specimen is introduced into the chamber and the chamber temperature is then cycled. A true thermal shock chamber can achieve a 265°C temperature variation rapidly, while thermal cycling may take hours to ramp up or down.

Temperature/Humidity Cycle Test



The Temperature/Humidity chamber provides a controlled environment for temperature and humidity cycling tests. These tests ensure that product will survive environmental conditions expected during storage, shipping and operational periods.

Freezer Chamber



The Freezer Chamber imitates various temperature environments for products, and tests the reaction of material to temperature. The freeze-thaw cycles are intended to place reasonable stresses on the product as it may encounter in the field. It is also intended that the freeze take place from the top down as might be seen in the field.

Accelerated Reliability Test Chamber



Accelerated reliability testing, or Accelerated Stress Testing (AST), subjects a product to a series of overstresses, effectively forcing product weak links to emerge by accelerating fatigue. Unlike traditional single axis vibration test methods or thermal only methods, an AST program requires specialized equipment to render the required stresses in the combined environment necessary to drive out latent failure modes. AST reveals product failure modes in a matter of hours or days, as compared to traditional test methods that can take weeks or even months to find, if at all.

Waterproof Chamber Test



This machine used to test anti-rain and waterproof performance of products.

Dust Proof Test Chamber



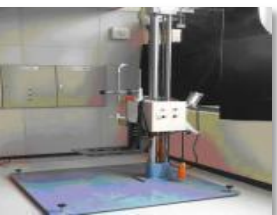
The dust chamber is used to qualify products on their capabilities for resistance to dust.

Vibration Test



Vibration testing is the shaking of a product to determine its ability to survive in real world conditions. Vibration testing can be performed to simulate transportation, storage, and operating environments.

Drop Test



The intent of the drop test is to determine if poor treatment of the carton during shipping will result in damaged product.