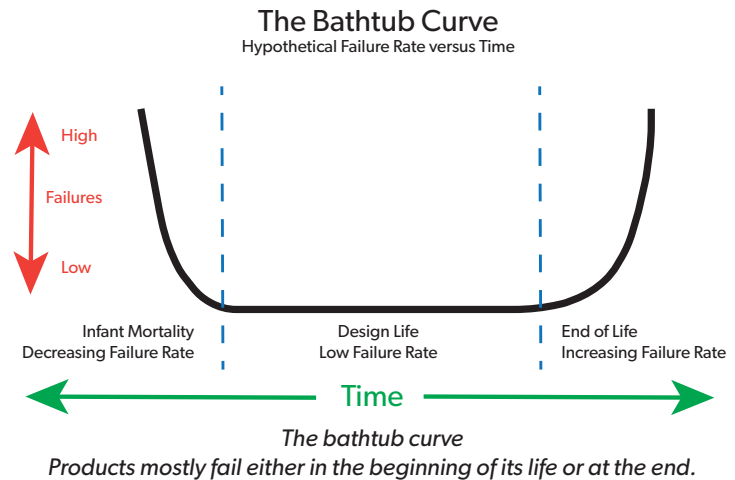


## The Westire 48 Hour Burn-In - Why?

Here's why...

Users of photocontrols and other outdoor lighting products demand reliability and performance. In order to guarantee reliability, manufacturers must be willing to review and analyze product failures and take corrective actions. There are bulk defects in components and minute fabrication variances that cannot be designed out. Perhaps more important in terms of product reliability is the quality and repeatability of the assembly process. Solder joints, connectors, and mechanical fixings are all potential origins for product failure. These defects can cause some parts to fail prematurely relative to the majority of the population. (known as infant mortality) Burn-in is an effective tool to screen out these weak parts.

Reliability specialists describe the product lifetime using a graphical model called the bathtub curve. The bathtub curve consists of three portions: an infant mortality period with a decreasing failure rate followed by a normal life period (also known as "design life") with a low, failure rate and ending with an end of life period that can exhibit an increasing failure rate.



**Burn-In Chamber**

Westire Manufacturing Facility, Belmullet, Ireland

The purpose of the burn-in process is to weed out 'infant mortalities', i.e. the first portion of the bathtub curve. These latent, early life failures are attributable to inherent faults within the purchased components, assembly errors and faults induced in components by inappropriate handling, e.g. ESD damage. It should be noted that there are no absolutes in the world of reliability testing, only probability and confidence levels for large populations.

And that's why Every Westire product is subjected to a 48 hour burn in followed by performance testing to catch any failures that were not designed out.

All Products experience failures at some point, at Westire we strive to ensure those only occur at the end of a product's useful life.

