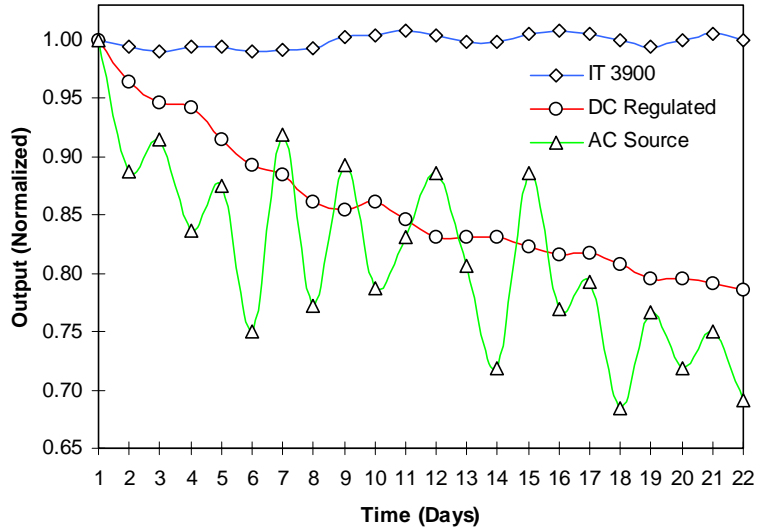


# Technical Note: **102**

## Question:

What is **Light-Lock™** and why does one need this proprietary light feedback feature found exclusively in the **it 3900** source?



## Answer:

The graph above shows **light** output versus time for various lightsources. The green curve shows the typical response for all unregulated sources highlighting how variations due to line voltage fluctuations and long term degradation of the lamp are responsible for large swings in output. Standard DC Regulated lightsources provide stability against line voltage fluctuations, but do nothing to compensate for lamp degradation or changes in ambient temperature. The **it 3900** with the proprietary **Light-Lock** system ensures stability and repeatability throughout the life of the lamp.

## Application:

The **Light-Lock** system provides excellent results when used with any vision system which relies on thresholding operations. The system provides excellent long-term stability ensuring that preset threshold values are triggered only by changes in the part under inspection, not changing light levels. It is also an excellent system when using pre-programmed lighting levels. Applications include multiple part recipes, color balancing, etc.

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