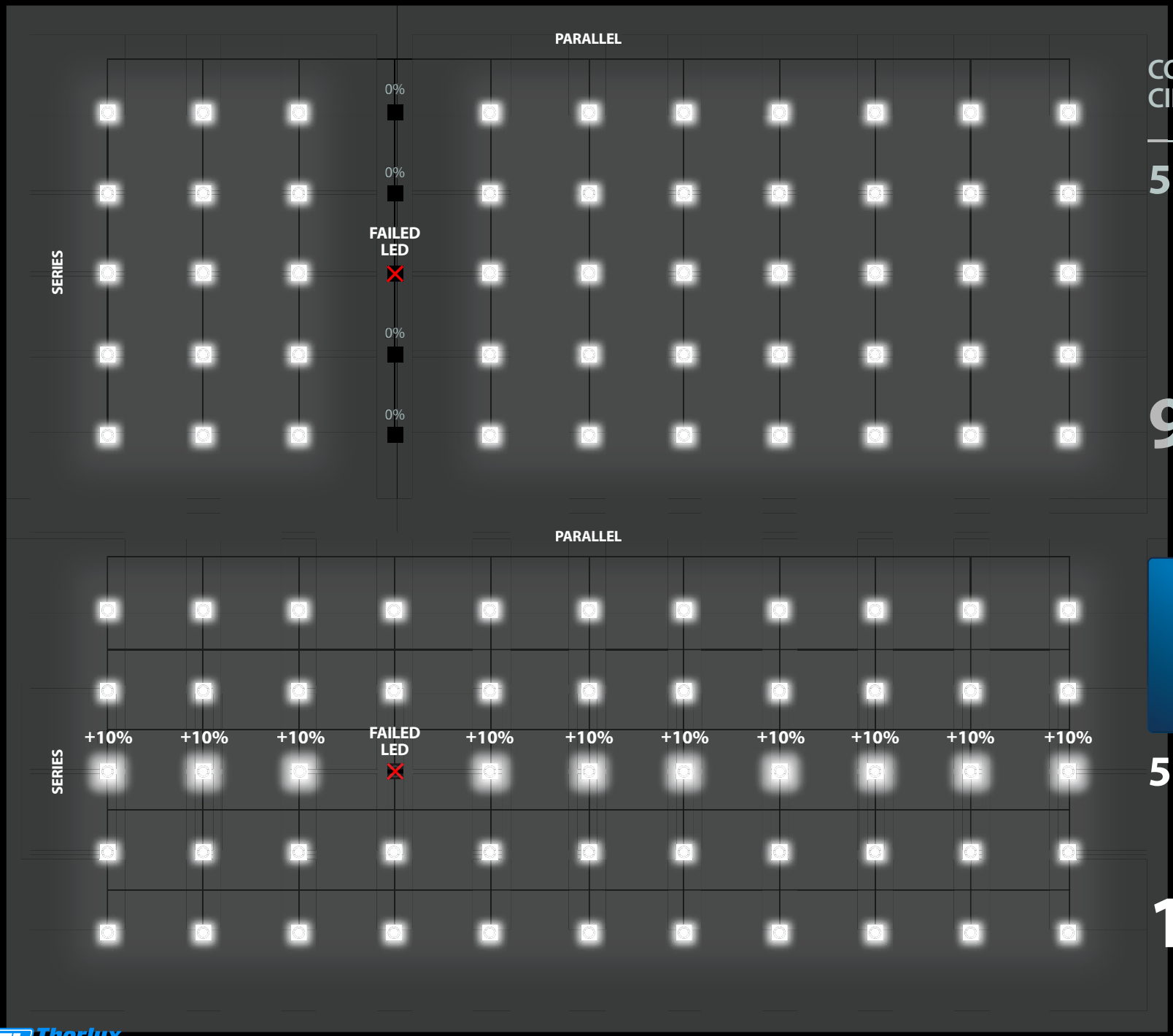
LED SYSTEM PROTECTION

LEDs are a very efficient light source and are resilient to many conditions that can be detrimental to the lifetime of traditional lamps.

For example, LEDs are largely unaffected by frequent switching, shock or vibration. However, LEDs or their solder joints can infrequently fail. In such circumstances it would be inconvenient if the failure caused significant loss of light, or if the luminaire extinguished completely.

In many luminaires LEDs are linked in series whereby a current flows through each LED in turn. Should an LED or solder joint fail, a whole row of LEDs, or in fact all LEDs may extinguish. Thorlux has designed specific protective measures to prevent such a condition.

LUX GUARD by Thorlux, is a patented current sharing PCB and circuit design philosophy. If an LED fails then its current is shared via neighbouring circuits, with each LED's brightness increasing slightly to compensate. **LUX GUARD** ensures that a luminaire continues to provide its designed lumen performance, even in the case of nuisance LED failures, and reduces the maintenance costs of a project.



CONVENTIONAL CIRCUIT

5 IN SERIES **11** IN PARALLEL

91% OUTPUT

LUX GUARD CIRCUIT

5 IN SERIES **11** IN PARALLEL

100% OUTPUT

Thorlux Lighting

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