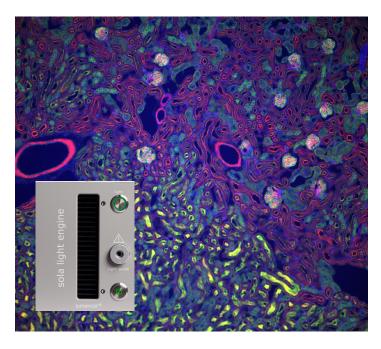


SOLA Light Engines maintain Best-In-Class Power & Longevity.

Does your research deserve anything less?



Lumencor engineers light for scientists. We listen to your needs and factor those into illumination products tailored to solve your technical lighting needs. Nowhere is that more apparent than for SOLAs, today's market-leading solid-state, whitelight Light Engines.

Lumencor has manufactured SOLA Light Engines for more than a decade. SOLAs maintain best-in-class performance on three fronts:

Brightness. Compare our optical power per wavelength in Figure 1, to other "me-too LED lamps" and ask yourself regarding power, ISN'T more better?

Spectral breadth. Do you need to excite YFP, CFP, mCherry, ICG and like fluorophors? Is having nIR light from your solid-state lamp important to your work?

Longevity. SOLA consistently produces outputs of >70% of initial, out-of-the-box optical power for more than a decade of use. That's real value!

SOLA is essentially the only lamp you'll need to buy for your fluorescence microscopy for more than 10 years. Don't be fooled by "me-too" LEDs, because all solid-state lighting is not created equal.

The four SOLA Light Engine models are primarily distinguished by spectral differences in their light output, Figure 2. The **SOLA** Light Engine provides white light for excitation of DAPI, GFP/FITC, YFP, Cy3, mCherry, Cy5. In the **SOLA FISH** Light Engine, output in the 475–600 nm region is red-shifted providing optimal excitation for SpectrumGreen™, SpectrumRed™ and other fluorophors commonly used for fluorescence *in situ* hybridization (FISH) in cytogenetic testing. The **SOLA V-N and U-N** Light Engines offer the broadest spectral coverage, including near infrared for excitation of Cy7 and ICG, and for other applications that benefit from the enhanced tissue penetration of near infrared light.

SOLA Light Engines are easy to operate. Warmup is essentially instantaneous: output stabilization occurs in 1 second. SOLA's light can be turned on only when needed for data acquisition. Hours of unproductive idle time required to maintain arc lamp output stability are eliminated.

SOLAs are further enhanced with the addition of active light stabilization, fully linear optical power control and electronic control interfaces on all models. User interfaces are an optional control pod or one of several supporting software packages on a USB-connected computer. Electronic attenuation of the light output is particularly valuable for applications involving photosensitive live specimens.

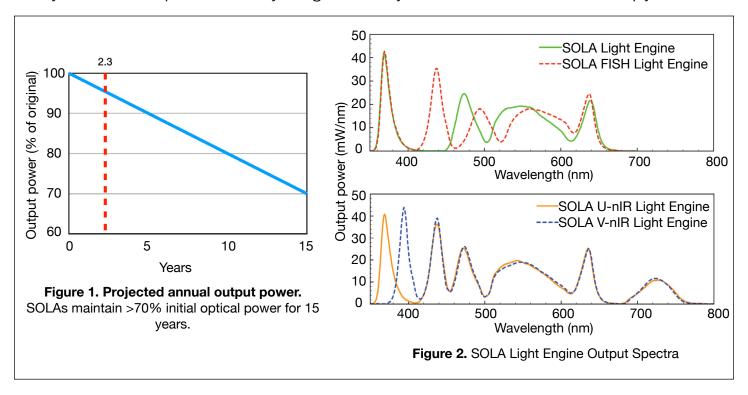
SOLA Light Engines contain no parts requiring replacement or alignment, need no routine maintenance and have a typical working lifetime over ten years, far exceeding that of any lamp. All SOLA Light Engines are mercury-free and RoHS compliant.

As with all Lumencor products, OEM customization is available upon request.

For more information on the <u>SOLA Light Engine</u>, please contact us at <u>info@lumencor.com</u>. To receive a purchase quotation for a SOLA Light Engine, please submit our <u>quotation request form</u>.



With **SOLA's exemplary power, spectral content, stability and longevity,** how can you afford to purchase anything else for your fluorescence microscopy needs?



White-light product competitive comparison with SOLA Light Engines:

	Lumencor	Excelitas			CoolLED	
White Light	SOLA Light Engines	mini+	110LED	Xylis	pE-400	pE-300 ^{white}
Number of Component Light Sources	4-6	3	4	6	4	3
Optimized GFP/FITC Excitations	✓	×	√	✓	×	×
Optimized Cy5 Excitation, Red Source	✓	×	✓	\checkmark	\checkmark	×
Optimized Cy7 Excitation, nIR Source	✓	×	×	\checkmark	×	×
Guaranteed & Certified Light Output	✓	×	×	×	×	×
Published Unit to Unit Variance of Output Power	✓	×	×	×	*	×
Certificate of Conformance Provided	✓	×	×	×	×	×
Highest Optical Power in this Comparison	✓	×	×	\checkmark	×	×
>500 mW / Component Light Sources	✓	×	×	×	×	×
Predictable, Linear Intensity Control	✓	×	×	×	×	×
Vibration and Heat Free Light Delivery via Liquid Light Guide	✓	×	√	√	optional	optional
Onboard Metrology Software	✓	×	×	×	×	×