



LIGHT **BYTES:** November 2017

NEW SPECTRA III light engine®

Integrated Array of Eight Powerful Solid-State Light Sources MORE POWER • MORE COLORS • MORE CONTROL

The next generation of solid-state illumination is here. In Lumencor's **SPECTRA III light engine**, eight individually addressable solid-state light sources deliver unprecedented performance. Each color band provides on the order of a half a watt of optical power at the end of a liquid light guide. The constituent light sources include LEDs, Lumencor's proprietary luminescent light pipes and lasers. The outputs of the sources are refined by bandpass filters and merged into a common optical train directed to the light output port on the front panel. The light output port has built-in adapter for connection to microscopes and other bioanalytical instruments through a standard, 3mm diameter liquid light guide, LLG. TTL trigger inputs are provided for all eight sources for applications requiring fast (10 microsecond) switching.

The SPECTRA III light engine delivers substantial increases in output power compared to its **SPECTRA®** and **SPECTRA X®** predecessors. The advantages are clear: YFP and Cy7 excitation outputs are increased five-fold; GFP and Cy5 exception outputs are doubled. Not only are the outputs more intense but they are sustained by active stabilization. An onboard feedback loop continuously monitors the light output and maintains constant light output over time. SPECTRA III is not only bright but undeniably reliable, stable and consistent.

TABLE 1: SPECTRA III Light Engine - Spectral Output

