

## SPECTRA X Light Engine

Power, Speed, and Flexibility

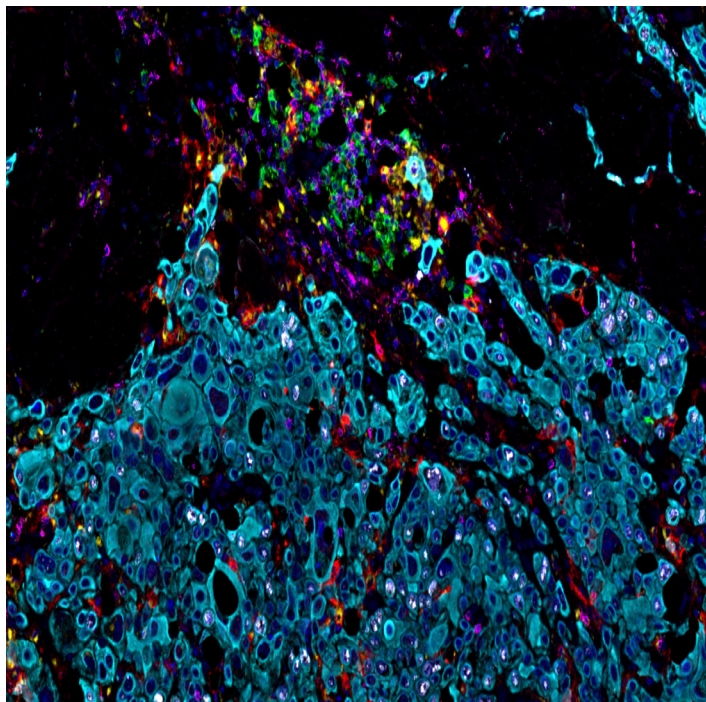


Image by Abdul Mohammed

## Integrated Array of Six Powerful Solid-State Light Sources

Lumencor's light engines are unique, solid state illuminators, ideally suited for fluorescence microscopes and bioanalytical instruments. SPECTRA X Light Engines enhance overall microscope performance and reduce illumination cost compared to traditional lamps and lasers. SPECTRA X is the best lighting product in today's life science marketplace for fast, live cell imaging.

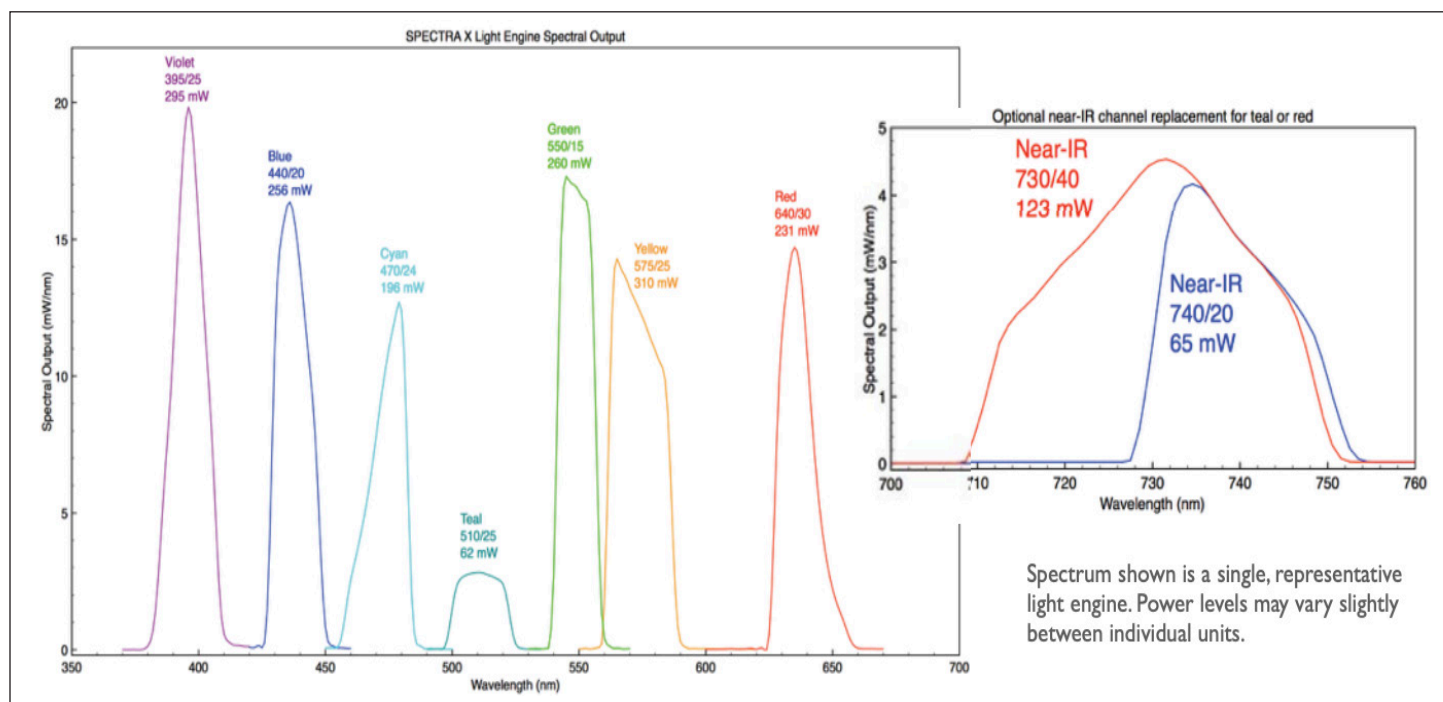
The SPECTRA X Light Engine incorporates six, bright, independently operable sources that span 380-680 nm. A suite of seven filters, one for each visible color (violet, blue, cyan, teal, green + yellow and red) is included in the purchase. Near infrared is an optional substitution for teal or red. Additional filter paddles and filters may be purchased to modify the bandpass of any of the sources. Exchangeable filters means any light engine user can tailor the output spectra with numerous filters to accommodate single band or multi band experimental designs.

High performance electronics allow for independent control of each source. Automated on/off, color switching and intensity control of each color may be accomplished via an optional control pod accessory, a Lumencor GUI or any of a number of third party software drivers. Fast electronics, on the order of tens of microseconds, make switching colors with this Light Engine orders of magnitude faster than a standard filter wheel, where mechanical constraints limit switching times to on the order of 100 milliseconds.

SPECTRA X Light Engines are compatible with all major brand microscopes via liquid light guide or optical fiber connections for the highest intensity performance. SPECTRA X Light Engines require no maintenance, no bulbs, no alignment and like all Lumencor products, contain no mercury. Units ship with a 36 month warranty

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

For more information on the SPECTRA X Light Engine, please contact us at [info@lumencor.com](mailto:info@lumencor.com). To receive a purchase quotation for a SPECTRA X Light Engine, please submit our online quotation request form.



## Eight Features and Operating Characteristics:

Features	Details
Sources	6 solid state sources operating independently, NIR option
Wavelengths	380 - 680 nm (380 - 780 nm with optional nIR source)
Output Power	~50-500 mW power per color band through a 3 mm dia LLG ~20-200 mW power per color band through a 1 mm dia optical fi ber
Bandpass Filters	7 user exchangeable fi lters mounted in paddles
Light Delivery	Liquid light guide, optical fi ber and microscope collimator sold separately
Easy to Install	Pre-aligned, simple to operate with control pod or 3rd party software, no maintenance
Control Interface	TL fast source selection, Serial (RS232) source selection and intensity co
Power Requirements	220 W, 24 VDC, 9.2 A
Dimensions (W x L x H)	28 cm x 19 cm x 11 cm
Weight	4.5 kg
Package Contents	SPECTRA X Light Engine® with 7 bandpass fi lters, power supply and cord