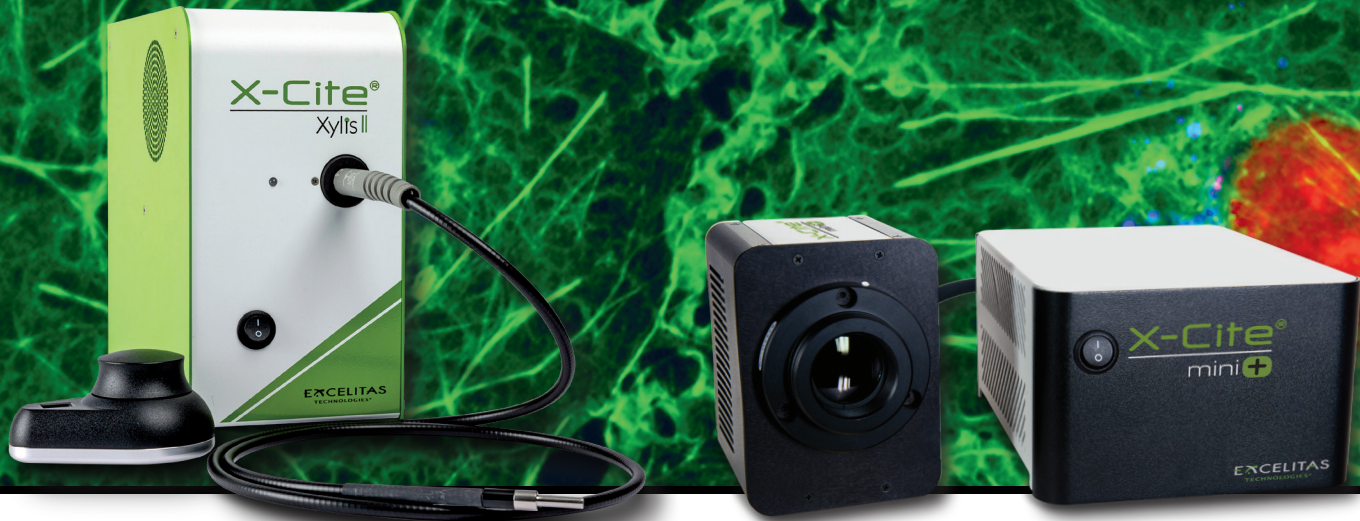


X-Cite®

Fluorescence Illumination • In Control

Why Switch from Lamp to X-Cite® LEDs?



X-Cite XYLIS™ II

- Liquid light guide coupled
- Excitation from DAPI to Cy7
- No replacement lamps

X-Cite mini+®

- Direct coupled
- Excitation from DAPI to Cy5
- Zero consumables

Stability

- No flicker
- No warm-up time / delay
- Slower intensity degradation over time
- Better than 1% stability without active feedback control
- Better repeatability than arc lamp

Electrical Consumption

- Up to 80% less than HBO mercury lamp
- LEDs do not run continuously and can be turned ON and OFF instantaneously

Lifetime

- > 20,000 hours or 3 year warranty on LEDs

Phototoxicity

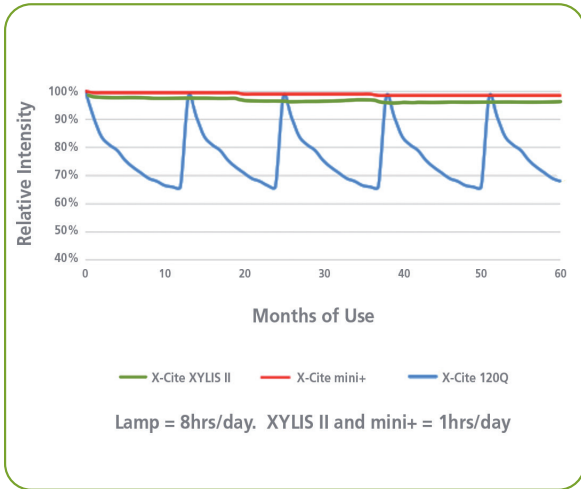
- Studies have shown that cells proliferate better and show less phototoxicity after imaging with a LED system vs. mercury lamp

Green

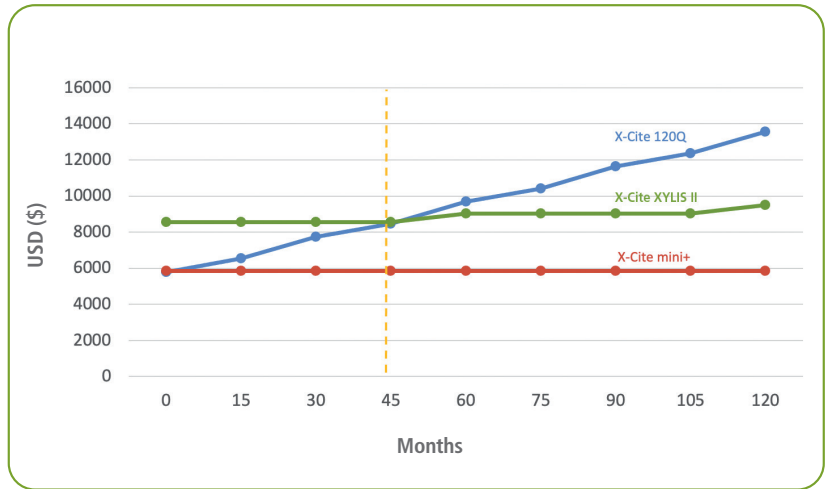
- Zero mercury
- Reduce energy consumption by >80%

EXCELITAS
TECHNOLOGIES®

Intensity Over Time - Typical Use

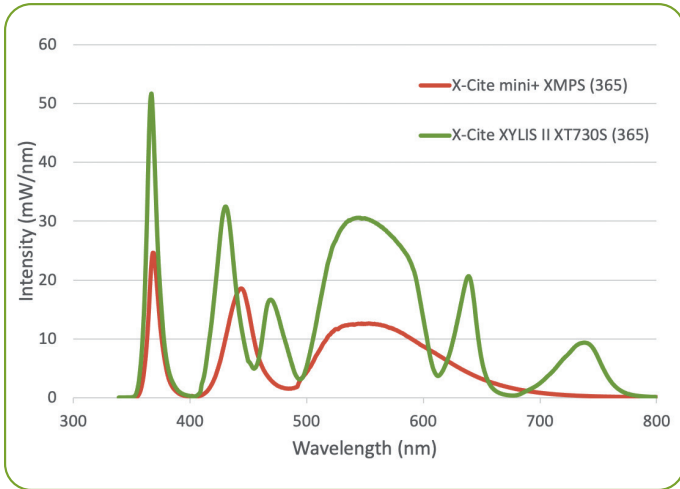


Cost of Ownership



Cost savings of X-Cite LED (mini+ & XYLIS II) vs. 120Q over 10 years. Assumption is standard use of 8 hours/day, 40 hours per week, and replacement of light guide every 4000 hours and lamp replacement every 2000 hours. The cost of ownership of XYLIS II breaks even with owning a 120Q in less than 4 years (45 months)

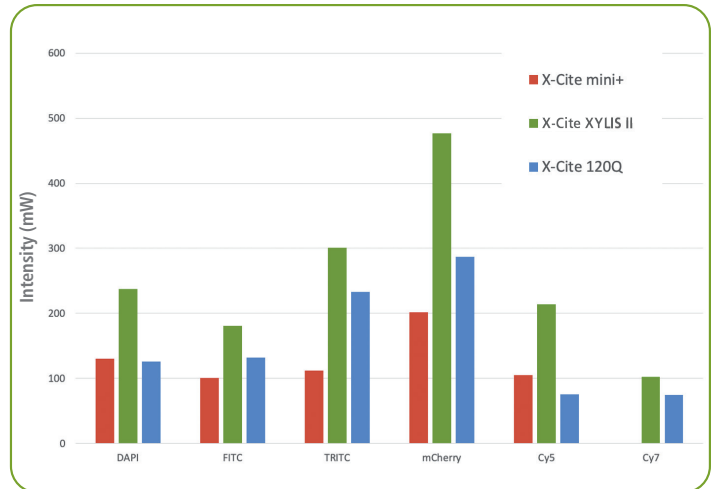
X-Cite XYLIS II & X-Cite mini+ Spectra



Notes:

- 1 For LLG coupled systems, measurements were obtained with a 3 mm x 1.5 mm Liquid Light Guide.
- 2 For direct coupled systems, measurements were scaled down for realistic comparisons to LLG coupled systems.
- 3 In all cases, light coupling efficiency depends on the microscope optics, filters, dichroics, etc.
- 4 Data represents typical output levels. Output will vary between individual units.

Optical power at the sample plane



Optical power measured at 20X (0.75 NA) magnification.