

Why Switch from Lamp to LEDs?



X-Cite mini+®

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

X-Cite TETREM™

- Liquid light guide coupled
- Excitation from DAPI to Cy5
- Independent channel control for 4 LEDs
- Fast channel switching via USB & TTL

X-Cite XYLIS™ II

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



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 lamps

Phototoxicity

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

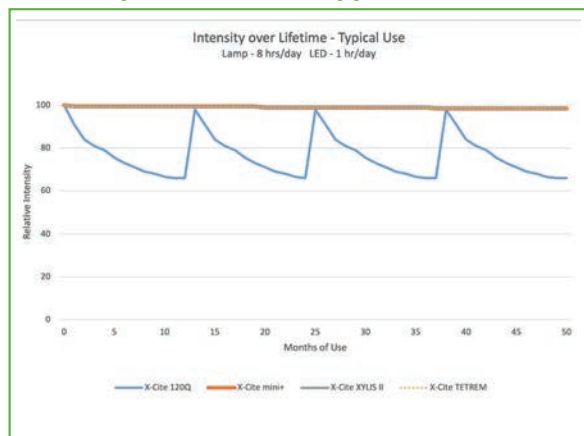
- > 20,000 hours or 3 year warranty on LEDs

Green

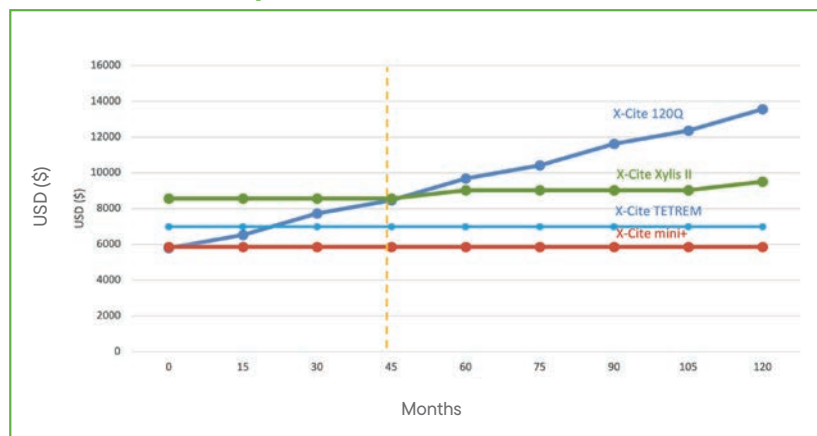
- Zero mercury
- Reduce energy consumption by >80%

X-Cite mini+®, TETREM™ and XYLIS™ II

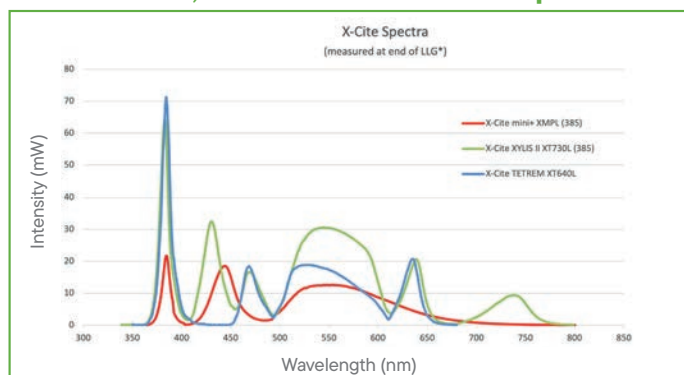
Intensity Over Time - Typical Use



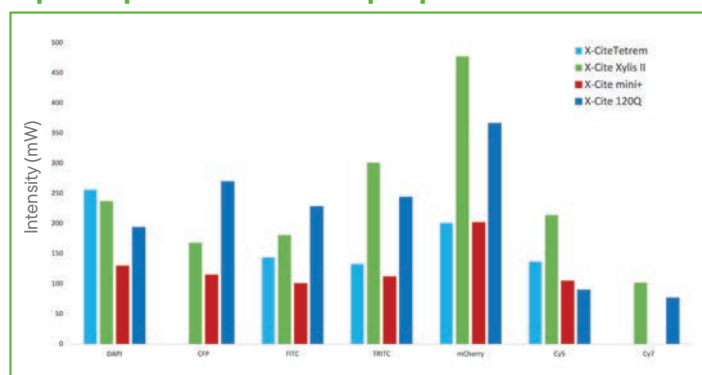
Cost of Ownership



X-Cite mini+, TETREM and XYLIS II Spectra



Optical power at the sample plane



Notes:

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



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