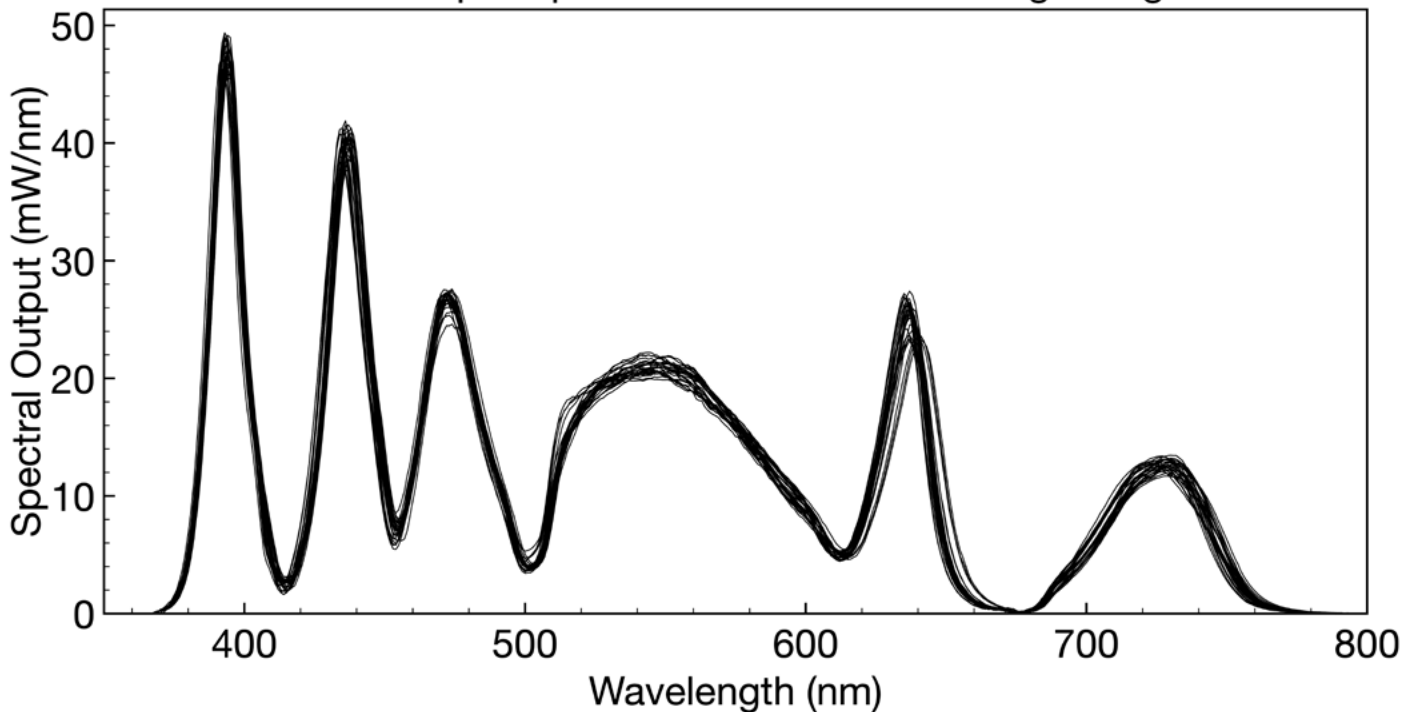


Consistent Light Sources for Consistent Results

Diversity is important in nature, not in light sources. If you are considering the purchase of two or more nominally identical light sources for your laboratory or manufacturing facility, you should want to know what “nominally identical” means. In the case of mercury and xenon arc lamps, and even some solid-state light sources, nominally identical actually means “in the same ballpark”. You can expect that two new light bulbs can emerge from their packaging and differ by 100%, a factor of 2x in optical power, yet pass production specification requirements of their manufacturer. Conversely, Lumencor’s [SOLA Light Engine](#) boasts identical performance; namely, within a 2% coefficient of variance in both spectral distribution and total optical power. This consistency is demonstrated below with data gathered from 28 randomly selected SOLA Light Engines.

Overlaid Output Spectra of 28 SOLA V-nIR Light Engines



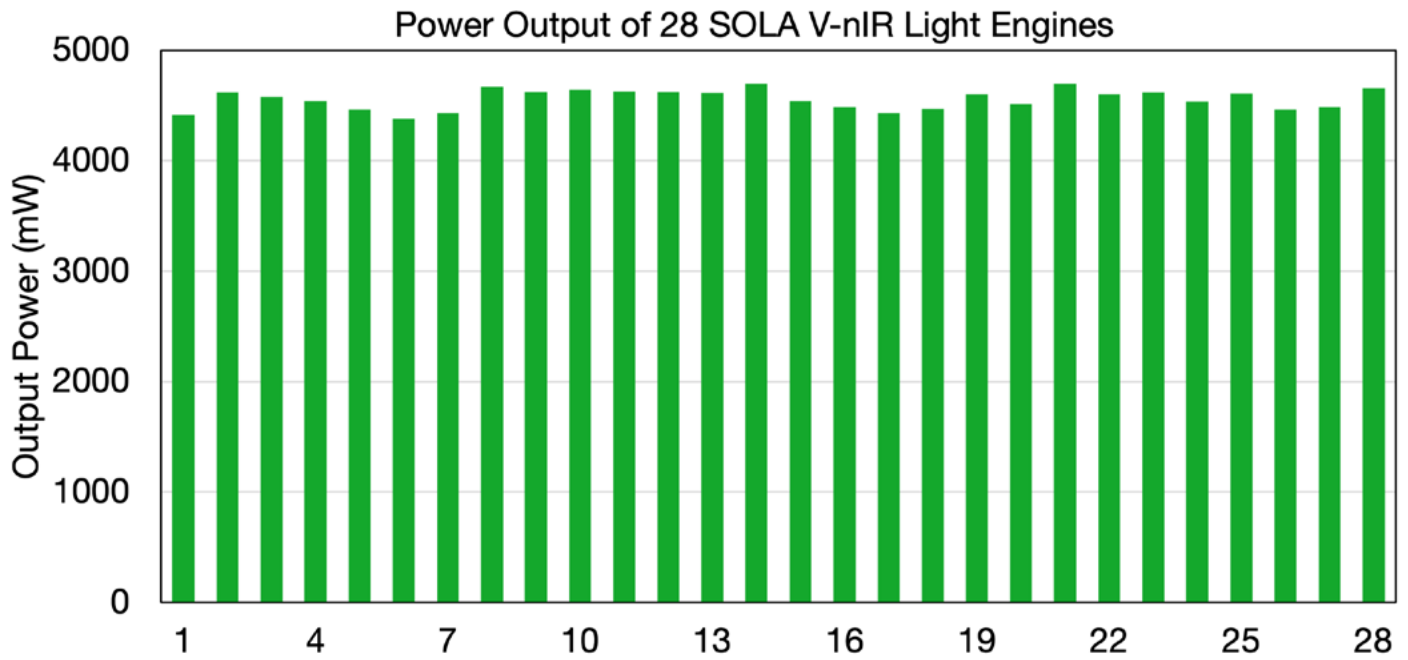
Consistent performance from one imaging system to another is vitally important in many use-case scenarios such as:

- Original equipment manufacturing (OEM)
- Multi-user core instrumentation facilities
- Cytogenetic and histopathology testing laboratories
- Any process where output data is subject to downstream validation for compliance purposes

Lumencor’s high level of spectral consistency is the result of precision manufacturing and quality control processes that are used in the production of all Lumencor products. This results in unsurpassed reproducibility from one Light Engine to the next.

With consistent spectral output, the user can also expect consistent optical power as shown below. Analysis of the total optical power output for the same 28 Light Engines characterized above shows a standard deviation of only 91 mW from the mean, equating to a 2% coefficient of variance (CV). Other light sources

currently on the market simply cannot match this level of inter-unit reproducibility. Consequently, OEM instrument designers and manufacturers are increasingly turning to Lumencor's solid-state illumination products for Light Engines and illumination products as constant as the speed of light!



Average output power = 4558 mW
Standard deviation = 91 mW
Coefficient of variance = 2%