

EASY TO CHANGE THE SPECTRAL OUTPUT OF THE LIGHT SOURCE

ANY LED CUBE CAN BE PLACED IN ANY OF 7 POSITIONS WITHOUT CONCERN FOR THE ORDER

WAVELENGTH SELECTION AND BEAM REFLECTION USING SEMROCK® STR FILTERS



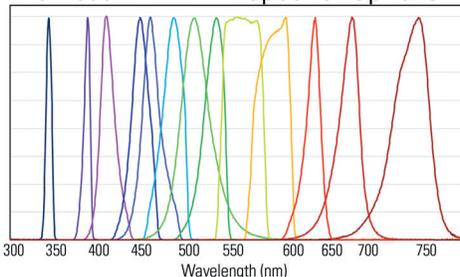
## LAMBDA 721 OPTICAL BEAM COMBINING SYSTEM

The **Lambda 721** is a new concept for combining up to 7 separate LED cubes with different spectra into a single common output beam. The LED cubes contain the LED, collimating optics, and a filter. These LED cubes are easily exchanged and installed with no tools required. Each LED cube is collimated before entering the optical path through the bandpass filter. The filters for each LED cube also function as mirrors that reflect the collimated beams from the previous light sources.

Traditionally, combining more than two light sources required the use of a dichroic ladder. Dichroic mirrors, which switch from transmission to reflection at one point in the spectrum, allow the combining of separate light sources, provided that those sources do not have overlapping wavelengths. The downside of this approach is that light sources cannot be easily changed. Dichroic ladders also demand careful

attention to the order in which the light sources are introduced into the optical path to avoid having the light blocked by the next dichroic in line. Typically, additional bandpass filters must be added in front of each light source before the dichroic, to select the desired range of wavelengths for each source. Each filter and dichroic used in the ladder decreases the total light output of the system.

Lambda 721 - LED Spectral Options



- 721CUBE-340
- 721CUBE-385
- 721CUBE-410
- 721CUBE-440
- 721CUBE-460
- 721CUBE-480
- 721CUBE-506
- 721CUBE-530
- 721CUBE-561
- 721CUBE-590
- 721CUBE-630
- 721CUBE-660
- 721CUBE-740

- LB-721** Lambda 721 Optical Beam Combiner and controller with 3 mm Liquid Light Guide (Please order LED cubes separately)
- LB-721-SMA** Lambda 721 Optical Beam Combiner and controller with SMA fiber (Please order LED cubes separately)
- SMA-LB** SMA fiber adapter with SMA fiber



**SUTTER INSTRUMENT**

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