### 495/605 nm BrightLine® dual-edge dichroic beamsplitter

# Part Number: FF495/605-Di01-25x36





### Semrock, Inc

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Your filter spectrum may differ slightly from the typical spectrum above, but is certified to meet the optical specifications noted below.



## 495/605 nm BrightLine® dual-edge dichroic beamsplitter

Multi-edge dichroics have two or more transitions from high reflectance to high transmission. These polarization-insensitive dichroic beamsplitters for 45° angle-of-incidence exhibit steep edges with very high and flat reflection and transmission bands. More complete reflection and transmission mean less stray light for lower background and improved signal-to-noise ratio. These filters are optimized for fluorescence microscopes and instrumentation, and may also be used for a variety of other applications that require beam combining and separation based on wavelength. They are based on Semrock's highly reliable hard-coating technology on ultralow-autofluorescence fused-silica substrates.

Part Number	Size	Price1	Stock Status
FF495/605-Di01-25x36	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$335	In Stock
FF495/605-Di01-22x29	22.0 mm x 29.0 mm x 1.1 mm (unmounted)	\$335	2nd Day Ship

Don't see a size you need? Contact us for custom sizing - available in less than a week (sizing fee applies).

1) US domestic pricing only. If you are ordering from outside the US, please contact your nearest regional distributor for the correct list price.

# **Optical Specifications**

Specification	Value
Reflection Band 1	Ravg > 95% 454 – 485 nm
Edge Wavelength 1	495 nm
Transmission Band 1	Tavg > 90% 505 – 550 nm
Reflection Band 2	Ravg > 95% 570 – 598 nm
Edge Wavelength 2	605 nm
Transmission Band 2	Tavg > 90% 620 – 675 nm

### **General Filter Specifications**

Specification	Value
Angle of Incidence	45 ± 1.5 degrees
Cone Half-angle	2 degrees
Optical Damage Rating	Testing has proven to show no signs of degradation when exposed to at least 6.0 W of power from an unfiltered xenon arc lamp over a 25 mm diameter (corresponding to 1.2 W/cm²) for over 500 hrs.
Flatness	<u>Standard</u>
Steepness	Standard
Effective Index	1.73

### Physical Filter Specifications (applies to standard sized parts; contact us regarding other sizes)

Specification	Value	
Transverse Dimensions (L x W)	25.2 mm x 35.6 mm	
Transverse Tolerance	± 0.1 mm	
Filter Thickness (unmounted)	1.05 mm	

Filter Thickness Tolerance (unmounted)	± 0.05 mm
Clear Aperture	≥ 80% (elliptical)
Scratch-Dig	60-40
Substrate Thickness (unmounted)	1.05 mm
Substrate Thickness Tolerance (unmounted)	± 0.05 mm
Orientation	Reflective surface marked with part number - Orient in direction of incoming light