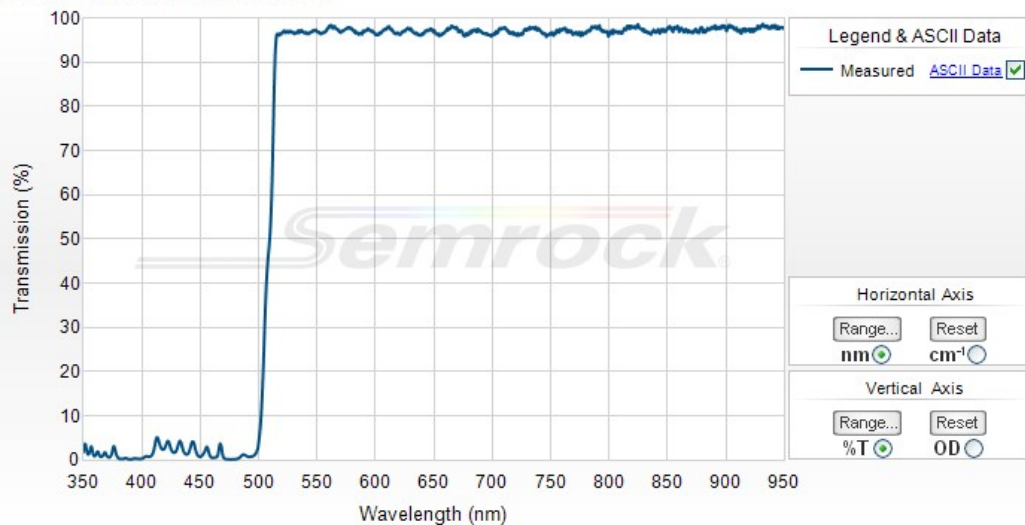


## 509 nm edge BrightLine® single-edge imaging-flat dichroic beamsplitter

Part Number: FF509-FDi01-25x36



### Semrock, Inc

3625 Buffalo Road, Suite 6  
Rochester, New York 14624

Main Phone: +1 585.594.7050 (worldwide)  
Toll Free Phone: 866.736.7625 (866-SEMROCK)  
(within US and Canada)

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



### 509 nm edge BrightLine® single-edge imaging-flat dichroic beamsplitter

BrightLine® image-splitting dichroic beamsplitters offer superb image quality for both transmitted and reflected light when separating beams of light by color for simultaneous capture of multiple images. For applications such as (FRET) and real-time live-cell imaging, users can now separate two, four or even more colors onto as many cameras or regions of a single camera sensor. The exceptional flatness of these filters virtually eliminates aberrations in the reflected beam for most common imaging systems up to a 10 mm beam diameter.

Common Fluorophore Pair to Split: CFP/YFP

Improved [FF509-FDi02-t3](#) super-resolution image-splitting dichroic available on 3 mm substrate now available

Part Number	Size	Price <sup>1</sup>	Stock Status
FF509-FDi01-25x36	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$335	In Stock

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	R <sub>avg</sub> > 95% 350 – 500 nm
Edge Wavelength 1	509 nm
Transmission Band 1	T <sub>avg</sub> > 93% 518.3 – 950 nm
Common Fluorophore Pair to Split	CFP/YFP

### 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/cm <sup>2</sup> ) for over 500 hrs.
Flatness	<a href="#">Imaging Flat</a>
Steepness	Standard
Effective Index	1.78

### 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)	$\pm 0.05$ mm
Orientation	Reflective surface marked with part number - Orient in direction of incoming light