Continuously Variable Short Wave Pass filter for the range 395 nm to 815 nm

CVSWP 395-815 (LF104557)

Continuously variable short-wavelength-pass filter with $\lambda_{50\,\%}$ travelling from ≤ 395 nm to ≥ 815 nm within ≤ 84 mm

Near-edge average transmittance

T_{avg}	$\lambda_{50\,\%}$	Interval start	Interval end
≥ 83 %	395 nm – 430 nm	0.95 * $\lambda_{50\,\%}$	0.99 * $\lambda_{50\,\%}$
≥ 88 %	430 nm – 520 nm	0.95 * $\lambda_{50\,\%}$	0.99 * $\lambda_{50\,\%}$
≥ 90 %	520 nm – 815 nm	0.95 * $\lambda_{50\,\%}$	0.99 * $\lambda_{50\,\%}$

Broad-band average transmittance

T_{avg}	$\lambda_{50\,\%}$	Interval start	Interval end
≥ 85 %	395 nm – 430 nm	0.49 * $\lambda_{50\,\%}$ + 147 nm	0.98 * $\lambda_{50\,\%}$
≥ 87 %	430 nm – 520 nm	0.49 * $\lambda_{50\,\%}$ + 147 nm	0.98 * $\lambda_{50\,\%}$
≥ 90 %	520 nm – 815 nm	$\lambda_{50\,\%}$ - 120 nm	0.98 * $\lambda_{50\,\%}$

Broad-band minimum transmittance

T_{min}	$\lambda_{50\,\%}$	Interval start	Interval end
≥ 80 %	395 nm – 430 nm	0.49 * $\lambda_{50\,\%}$ + 147 nm	0.98 * $\lambda_{50\,\%}$
≥ 85 %	430 nm – 520 nm	0.49 * $\lambda_{50\,\%}$ + 147 nm	0.98 * $\lambda_{50\,\%}$
≥ 87 %	520 nm – 640 nm	$\lambda_{50\,\%}$ - 120 nm	0.98 * $\lambda_{50\,\%}$
≥ 88 %	640 nm – 815 nm	$\lambda_{50\,\%}$ - 120 nm	0.98 * $\lambda_{50\,\%}$

Extended, broad-band average transmittance

T_{avg}	$\lambda_{50\,\%}$	Interval start	Interval end
≥ 85 %	520 nm – 640 nm	0.49 * $\lambda_{50\,\%}$ + 147 nm	$\lambda_{50\,\%}$ - 120 nm
≥ 85 %	640 nm – 815 nm	0.29 * $\lambda_{50\,\%}$ + 278 nm	$\lambda_{50\,\%}$ - 120 nm

Extended, broad-band average transmittance

T_{min}	$\lambda_{50\,\%}$	Interval start	Interval end
≥ 80 %	520 nm – 640 nm	0.49 * $\lambda_{50\,\%}$ + 147 nm	$\lambda_{50\,\%}$ - 120 nm
≥ 80 %	640 nm – 815 nm	0.29 * $\lambda_{50\,\%}$ + 278 nm	$\lambda_{50\,\%}$ - 120 nm

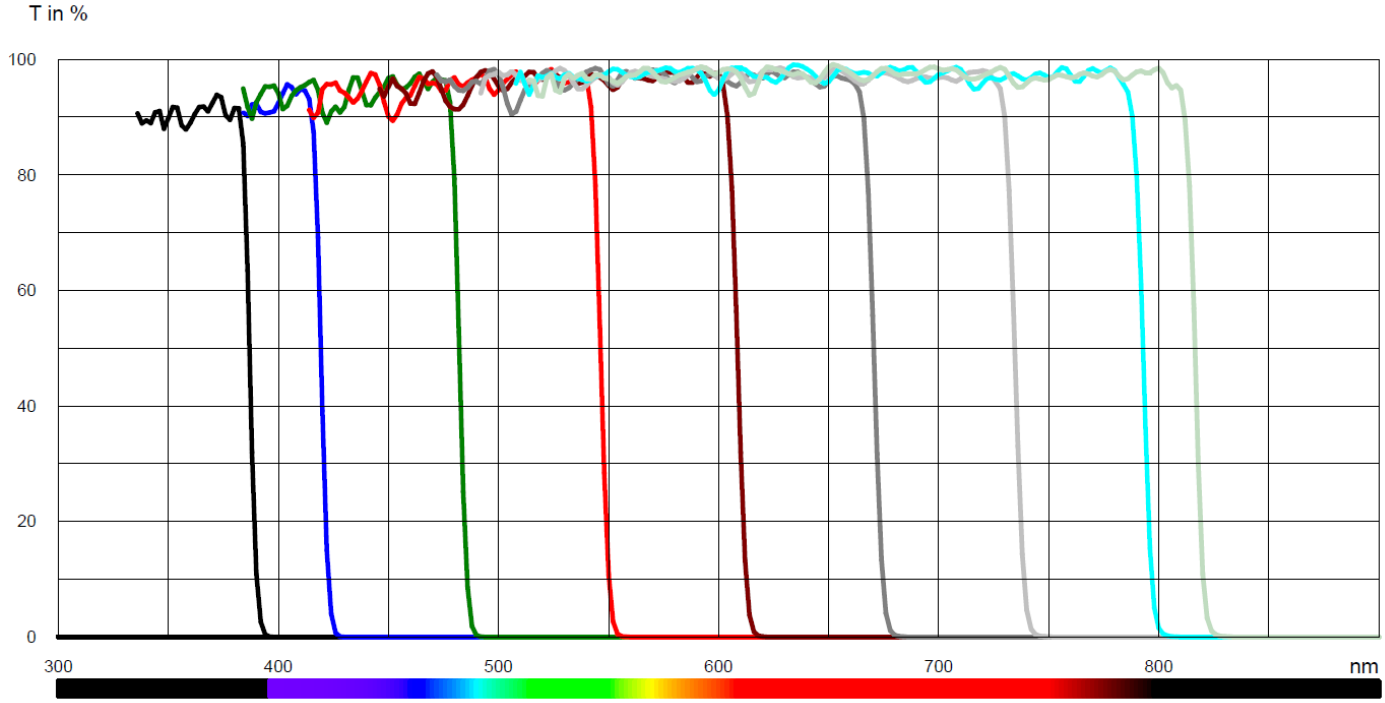
Broad-band blocking (maximum transmittance)

T_{max}	$\lambda_{50\,\%}$	Interval start	Interval end
≤ 0.2 %	395 nm – 815 nm	1.025 * $\lambda_{50\,\%}$	1.4 * $\lambda_{50\,\%}$ + 220 nm, or 900 nm (whichever is smaller)
≤ 1 %	395 nm – 815 nm	1.02 * $\lambda_{50\,\%}$	1.45 * $\lambda_{50\,\%}$ + 220 nm, or 900 nm (whichever is smaller)
≤ 10 %	395 nm – 815 nm	1.015 * $\lambda_{50\,\%}$	1.45 * $\lambda_{50\,\%}$ + 220 nm, or 900 nm (whichever is smaller)

Broad-band blocking (average transmittance)

T_{avg}	$\lambda_{50\,\%}$	Interval start	Interval end
≤ 0.02 %	395 nm – 815 nm	1.03 * $\lambda_{50\,\%}$	1.4 * $\lambda_{50\,\%}$ + 220 nm, or 900 nm (whichever is smaller)

Typically measured transmittance of CVSWP 395-815 (LF104557)



Typically measured blocking of CVSWP 395-815 (LF104557)