

LASER LINE INTERFERENCE FILTERS

These filters pass a limited band centered on the resonance of the laser and attenuate the background plasma and secondary emissions that often result in erroneous signals. In the case of diode lasers, these filters can be used to make the light output more monochromatic.

Laser line filters provide 70 - 90% throughput with spectral control from 0.85 to 1.15 of the CWL. An accessory blocker can be ordered to control a much wider spectral range from the deep UV to the IR. This additional blocker results in a minor (20%) loss of throughput.

■ Standard Specifications:

Ring Diameter :	D25.4±0.2mm
Ring Thickness(t) :	3mm
Clear Aperture :	>d20mm
FWHM:	10nm
Block:	0.01%(±10nm from the peak)
Mounted Material:	Black anodized aluminum

■ Standard Laser Line Interference Filters:

Wavelength (nm)	Wavelength tolerance(nm)	Peak Transmission	Product Number
355	±2nm	30%	UQT-LLIF0101
488	±2nm	50%	UQT-LLIF0102
514.2	±2nm	60%	UQT-LLIF0103
532	±2nm	60%	UQT-LLIF0104
632.8	±2nm	60%	UQT-LLIF0105
670	±2nm	60%	UQT-LLIF0106
780	±2nm	60%	UQT-LLIF0107
830	±2nm	60%	UQT-LLIF0108
850	±2nm	60%	UQT-LLIF0109
980	±2nm	60%	UQT-LLIF0110
1064	±2nm	60%	UQT-LLIF0111
1550	±3nm	60%	UQT-LLIF0112

Please Contact [ultiQuest](#) for other dimensions in prototype and production quantities.

NOTES!

- ➔ Interference filters depend on the field angle of incident light. When it is at an angle, the center wavelength shifts to the shorter wavelength and transmittance also decreases. Therefore, enter a parallel or almost parallel light at a zero angle. (As the half bandwidth decreases, angle dependency increases.) The center wavelength tolerance is set to the longer wavelength side by considering the angle dependency of interference filters.
- ➔ The design temperature is 23°C. Each specification value is valid when it is 23°C. (As the temperature increases, the wavelength shifts to the longer wavelength side.)
- ➔ Filter thickness is not specified because it changes according to lots.
- ➔ Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.

