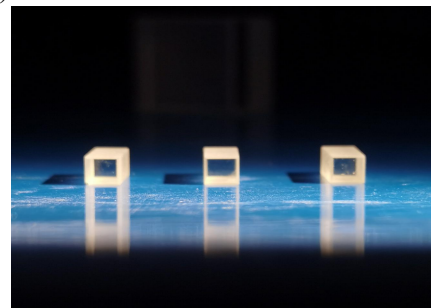


CLBO Crystal

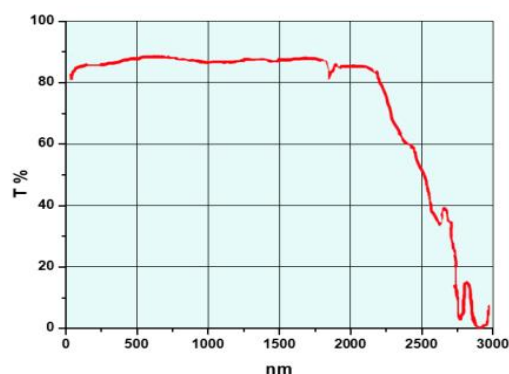
CsLiB₆O₁₀ (CLBO) crystal has a short UV cutoff edge (180 nm) and has a large effective NLO coefficient (2 times that of KDP). CLBO crystal has a small discrete angle while its receiving angle is large. In a vacuum UV output of 193 nm can be obtained by its phase matching, which behaves as an excellent deep-UV NLO crystal material. VoyaWave Optics can customize different sizes and different requirements of crystal devices according to customer needs (please consult to purchase).

Main features:

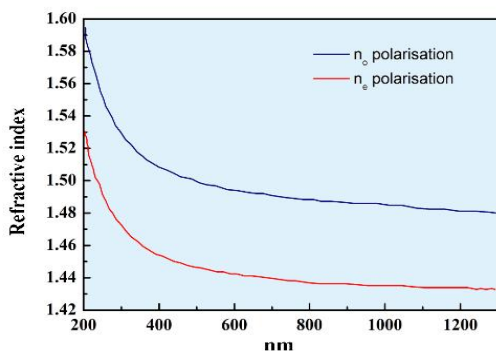
- Large reception angle, small discrete angle
- Shortwave cut-off edges up to 180 nm
- Effective NLO coefficient (approximately twice of the KDP)
- Due to the short growth cycle, large crystal sizes can be grown
- The conversion efficiency of 4x and 5x frequency for Nd:YAG lasers is large
- 193 nm vacuum UV output can be obtained by phase matching.



CLBO T%-nm Curve



Refractive index dispersion



Customized Services:

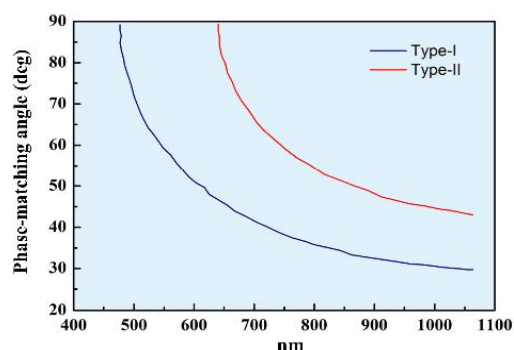
- Size, and angle can be customized
- Coating according to customer needs
- High-quality quality assurance

Note: CLBO is very easy to deliquesce, please use and store in a dry environment.

See Appendix P09 for more crystal structures and physical properties of 193 nm vacuum UV output can be obtained by phase matching.

Typical applications:

- All solid-state UV lasers
- Semiconductor inspection
- OPA
- PCB drilling
- 266 nm of all solid-state lasers



Phase matching angles of types I and II

follow the basis
Variation in λ