

LBO Crystals

**SUPER
POLISHED!**

LBO (Lithium Triborate LiB_3O_5) is a nonlinear optical crystal ideally suitable for various nonlinear optical applications. LBO crystals combine wide transparency, moderately high nonlinear coupling, high damage threshold and good chemical and mechanical properties.

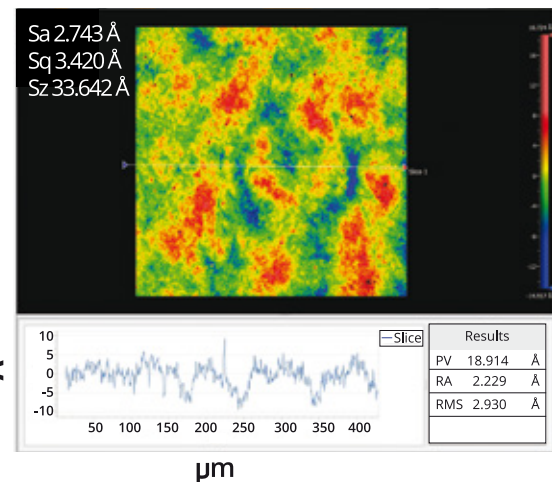
Special Advantages of our LBO:

- Super polished elements for excellent surface quality: roughness < **3Å** RMS and scratch dig 2/1
- Very low bulk absorption: up to 2ppm/cm at 1064nm
- Crystal size up to 50x50 mm² and maximum length of 40 mm
- Strict quality control

Our LBO features:

- Wide transparency range (160nm – 2600nm)
- Moderately high nonlinear coefficient
- High damage threshold
- Type I and non-critical phase matching in a wide wavelength range
- High optical homogeneity
- Wide acceptance angle and small walk-off angle

ROUGHNESS MEASUREMENTS BY ZYGO INTERFEROMETER



Common Applications

- Second and third harmonic generation of high power diode pumped Nd:YAG and Nd:YLF lasers, Alexandrite, Ti:Sapphire, Dye lasers and ultrashort pulse lasers