

# LaBr<sub>3</sub>(Ce) Scintillator

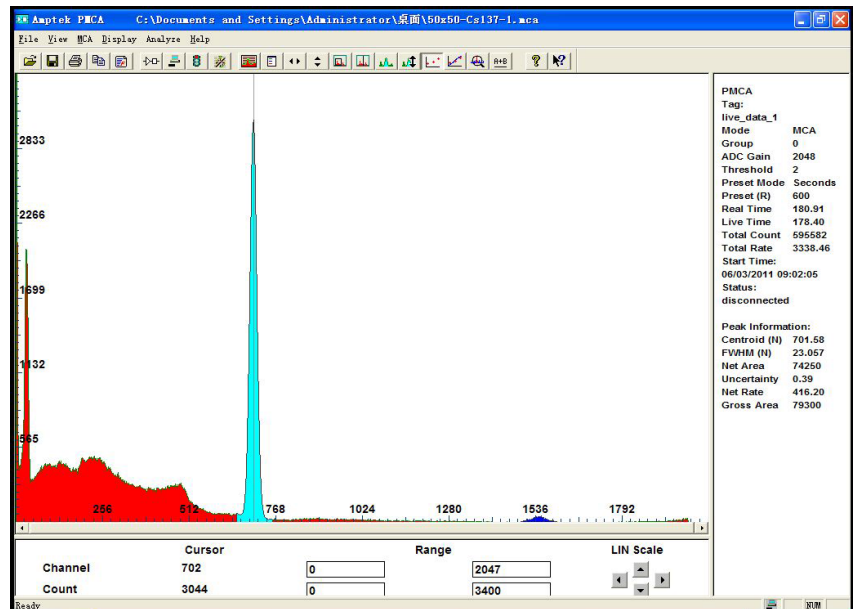
Cerium doped LaBr<sub>3</sub>(LBC) is one of new generation inorganic scintillation crystal, which possesses the best energy resolution around 2.8-3.6% than all known scintillators, and its light output is 1.7 times higher than NaI(Tl) with the short decay time at only 25ns, which has gained special interest due to their high density and atomic number as well.

Meanwhile, unique sealed method was used that all surfaces of the crystal was polished in order to get optimum optical performance, while side surface and bottom surface of the crystal column were both wrapped with reflecting layer. The top surface is covered with a quartz glass and other surface of the crystal are closed with the aluminum can.

All these features result in excellent scintillation properties and high detection efficiencies in comparison to NaI(Tl).

## Properties of crystal

Density(g/cm <sup>3</sup> )	5.2
Photons/MeV	61,000
Energy resolution(Cs137,662Kev)	2.8-3.3%
Decay constant(ns)	25
Emission peak(nm)	380
Hygroscopicity	Yes



\*We can provide only academic research purpose.