

Alpha Spectra, Inc. Data Sheet

CeBr₃ Detectors

Grand Junction, Colorado

CeBr₃ has excellent absolute light yield. It also has low intrinsic background. Alpha Spectra, Inc. offers this scintillator in the following design types: open face, demountable and environmental.



Figure 1. ASI model number CB8I8/2(6231). (ASI photo)

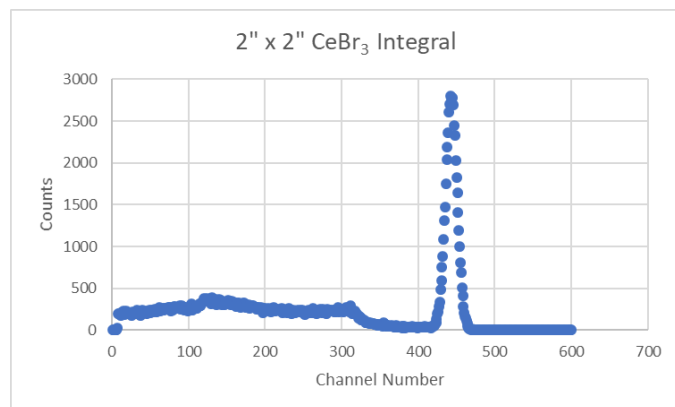


Figure 2. ASI model number CB8I8/2(6231), PHR 3.9% at 662 KeV.

Please call us to discuss your requirement. Be sure to review our designs on our website.

Alpha Spectra, Inc. CeBr₃ Specifications

Detector Style:	Open face, thin, thin integral, demountable or environmental type
Crystal Material:	CeBr ₃ Cerium Bromide
Density:	5.07 g/cc
Effective Atomic Number:	45.9
Hygroscopic:	Very
Wavelength of Maximum Emission:	380 nm
Light yield:	60,000 photons/MeV
Background:	0.04Bq/cm ³
Decay time:	19 nsec (at room temperature)
Index of Refraction at wavelength of maximum emission:	2.09
Energy Resolution at 662 KeV:	3.8% (typical), higher depending on design configuration.
Dimensions offered:	Up to 76mm diameter, up to 76mm height
Crystal Housings:	Aluminum, stainless steel
Electronics:	14 pin, voltage divider or preamp configuration.