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Resolution Performance of HERA-B Lead-Glass Calorimeters ANTHONY LOSADA, EDWARD BRASH, JORDAN THOMAS, Christopher Newport University, CARLOS AYERBE-GAYOSO, MATTHEW BURTON, CHARLES PERDISAT, College of William & Mary, MARK JONES, VINA PUNJABI, Thomas Jefferson National Accelerator Facility, CARSTEN HAST, ZENON SZALATA, SLAC — In preparation of upcoming 12GeV experiments at Thomas Jefferson National Accelerator Facility it is necessary to upgrade existing systems or install new detectors. As part of this effort, an array of lead-glass sampling calorimeters is need for use in the GEP-5 experiment. A sampling calorimeter can be used to determine the energy and spatial position of a high energy particle that enters it while simultaneously stopping the particle. To determine the appropriate construction to meet the needs of upcoming experiments, it was necessary to take an existing model and confirm its energy and position resolution. This model could then be confirmed as an option for the final construction, or used as a starting point to design a better detector. For our test we obtained ten lead-glass calorimeters used in HERA-B and tested them in End Station A at SLAC. I will report on our findings for the HERA-B lead-glass sampling calorimeters. I will cover the results of both the energy and position resolutions as well as the methods used to determine these quantities.

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