New CsI(Na) Hodoscope Array For Heavy Ions KRISTA MEIER-BACHTOL, National Superconducting Cyclotron Laboratory, Michigan State University, DANIEL BAZIN, National Superconducting Cyclotron Laboratory, DAVE MORRISSEY, National Superconducting Cyclotron Laboratory, Michigan State University — A scintillator based hodoscope array was recently constructed at the National Superconducting Cyclotron Laboratory at Michigan State University to measure the total kinetic energy of fragments in the focal plane of the large S800 magnetic spectrometer at NSCL. This measurement is necessary to provide independent charge and mass number identification of the heavy ions at the focal plane. The array consists of 32 closely packed 3”x3”x2” CsI(Na) crystals each coupled to a photomultiplier. The properties of the array were characterized with a monoenergetic $^{76}$Ge beam and fragmentation products from reactions with beryllium and gold targets. Results of these tests and an overview of the capabilities of the new hodoscope will be presented.