Abstract Submitted for the DNP11 Meeting of The American Physical Society

Vertical Charge Exchange Cell for Collinear Laser Spectroscopy at NSCL¹ ANDREW KLOSE, Dept. of Chemistry and NSCL, Michigan State University, East Lansing, MI 48824, USA, KEI MINAMISONO, NSCL, Michigan State University, East Lansing, MI 48824, USA, NADJA FROEMMGEN, CHRISTOPHER GEPPERT, MICHAEL HAMMEN, JOERG KRAEMER, AN-DREAS KRIEGER, University of Mainz, D-55099 Mainz, DE, PHIL LEVY, TRI-UMF, Vancouver, BC, CA V6T 2A3, PAUL MANTICA, Dept. of Chemistry and NSCL, Michigan State University, East Lansing, MI 48824, USA, WILFRIED NOERTERSHAEUSER, University of Mainz, D-55099 Mainz, DE, SOPHIA VIN-NIKOVA, Dept. of Chemistry and NSCL, Michigan State University, East Lansing, MI 48824, USA — A vertical charge exchange cell (CEC), originally developed at TRIUMF/ISAC, has been constructed at NSCL for the Beam Cooling and Laser Spectroscopy (BECOLA) system. The CEC was initially commissioned at the TRIGA-Laser facility at the University of Mainz by neutralizing a 10 keV Rb⁺ ion beam with K vapor. The neutralization efficiency was measured as a function of the CEC heater temperature. The line shape of the Rb D2 transition was also examined in relation to the neutral fraction of the Rb beam. Details of the CEC design and operation, as well as the results of the tests will be discussed.

¹This work was supported in part by NSF Grant PHY 06-06007.

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Date submitted: 30 Jun 2011 Electronic form version 1.4