Abstract Submitted for the DPP05 Meeting of The American Physical Society

**Radially-Resolved Measurements of the Effect of Boundary Walls** in Radiation Transport Experiments<sup>1</sup> C.A. BACK, General Atomics, O.A. HURRICANE, J.H. HAMMER, J.I. CASTOR, S.A. MACLAREN, O.L. LANDEN, M.D. ROSEN, Lawrence Livermore National Laboratory — We have performed high-powered laser experiment to investigate the effect of the boundary wall of finite mm-sized samples on the propagation of a Marshak wave. We present radiallyresolved emission measurements of a  $Ta_2O_5$  aerogel heated from the opposite side by x-ray drive created by a halfraum. The experiments are performed on the Omega laser and data are obtained by a 1D streaked spectrometer which records photon energies of 550 eV. It complements work presented previously in which we measured the propagation of a diffusive supersonic Marshak wave in different length samples [1]. Here we give details of the measurements and the effects of boundary conditions of finite samples. Data will be compared from a high-Z Au boundary versus a low-Z Be cylindrical and discussed with respect to an analytic model that takes into account the albedo of the boundary wall.

<sup>1</sup>Work supported by the US DOE under DE-AC03-01SF22260 and by the University of CA, Lawrence Livermore National Laboratory under W-7405-ENG-4.

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Date submitted: 22 Jul 2005

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