About the Cover:

The cover depicts the measured surface profile of a cylindrically symmetric echelon fabricated by electron-beam evaporation. A silicon dioxide monolayer is deposited through a discontinuous (stepped) mask profile to deposit a series of annular regions, each increasing in thickness by 0.53 μ m from the center (0 thickness) to the edge of the 100-mm-diam substrate (thickness 12.1 μ m). The surface profile was characterized by R. Boni using stitching white-light interferometry on a Zygo NexView.

The figure below exhibits the concentric nature of the echelon steps. Transitions between the individual steps of the echelon display a sloped sidewall of the order of 150 μ m, the primary deviation from the ideal design with vertical sidewalls between steps.



This report was prepared as an account of work conducted by the Laboratory for Laser Energetics and sponsored by New York State Energy Research and Development Authority, the University of Rochester, the U.S. Department of Energy, and other agencies. Neither the above-named sponsors nor any of their employees makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, mark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring

Printed in the United States of America Available from

National Technical Information Services U.S. Department of Commerce 5285 Port Royal Road Springfield, VA 22161 www.ntis.gov by the United States Government or any agency thereof or any other sponsor. Results reported in the LLE Review should not be taken as necessarily final results as they represent active research. The views and opinions of authors expressed herein do not necessarily state or reflect those of any of the above sponsoring entities.

The work described in this volume includes current research at the Laboratory for Laser Energetics, which is supported by New York State Energy Research and Development Authority, the University of Rochester, the U.S. Department of Energy Office of Inertial Confinement Fusion under Cooperative Agreement No. DE-NA0003856, and other agencies.

For questions or comments, contact Katelynn Bauer, Editor, Laboratory for Laser Energetics, 250 East River Road, Rochester, NY 14623-1299, (585) 276-5618.

www.lle.rochester.edu