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WITHDRAWN–Performance Evaluation of Square Pore Microchannel Plates A. VISCO, E.C. HARDING, R.P. DRAKE, D.C. LAFFERTY, G.K. RATHORE, University of Michigan, Ann Arbor, MI — Microchannel Plates (MCP) are used in a variety of imaging systems as a means of amplifying the incident radiation. Using a microchannel plate mount, developed at the University of Michigan, we compare square and round pore MCPs. Using a characterized x-ray source, we investigate the differences in the pulse height distribution, modular transfer function, and Quantum efficiency of these two types. Using a metal grid, we create a potential difference above the MCP that forces ejected electrons back into the pores, which may prove to increase the quantum efficiency of the system. Measurements of the effect of the reflecting grid on the quantum efficiency are presented. Work supported by the Naval Research Laboratory, National Nuclear Security Administration under the Stewardship Science Academic Alliances program through DOE Research Grant DE-FG52-03NA00064, and through DE FG53 2005 NA26014, and Livermore National Laboratory.

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