

Abstract Submitted
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Active image readout system for extreme neutron environments for NIF¹ PERRY BELL, DAVID BRADLEY, LLNL, JOSEPH KILKENNY, General Atomics, CHRISTOPHER HAGMANN, NOKIO IZUMI, GARY DEIS, JEFF AYERS, LLNL — The National Ignition Facility is expected to start producing x-ray flux and neutron yields higher than any produced in laser driven implosion experiments in the past. Tuning of non-igniting capsule will require x-ray imaging of near burning plasmas that are generating yields of 10^{17} neutrons. X-ray recording systems need to work in more hostile conditions than we have encountered in past laser facilities. We will present modeling, experimental data, and design concepts for x-ray imaging with electronic recording systems for this environment.

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