

Abstract Submitted
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Recent Bolometry Upgrades and Results from the HIT-SI and NSTX Experiments M.A. CHILENSKI, T.R. JARBOE, B.A. NELSON, R. RAMAN, University of Washington, L. ROQUEMORE, Princeton Plasma Physics Laboratory, B.M. JONES, Sandia National Laboratory — The bolometry suite on the Helicity-Injected Torus (HIT-SI) has recently been upgraded with two new channels in order to measure the radiated power in the mouth of one of the helicity injectors, as well as an upgraded wide-view bolometer to maximize the solid angle imaged at the midplane. This upgrade will allow a better understanding of the magnitude of the power radiated in the injectors versus the confinement region. In addition to a multi-chord bolometer array, the National Spherical Torus Experiment (NSTX) is also equipped with three wide-view bolometers looking at various regions of the plasma. One bolometer looks into the main confinement region at midplane along a chord parallel to the midplane, one looks down to the lower divertor/injector region and one looks from the bottom up. Work is proceeding to cross-calibrate these bolometers to the multi-chord array. Once this calibration is complete, it will be possible to obtain rapid estimates of the total radiated power, which will be compared to the total input power.

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