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**Experimental Comparison of Radiative Characteristics and Implosion Dynamics of Planar Foils and Single Planar Wire Arrays in Current Region 0.9-1.6 MA on the UNR Zebra generator\*** V.L. KANTSYREV, University of Nevada, Reno, USA, A.S. CHUVATIN, Ecole Polytechnique, France, L.I. RUDAKOV, Icarus Inc., USA, A.S. SAFRONOVA, A.A. ESAULOV, G.C. OSBORNE, I. SHRESTHA, V.V. SHLYAPTSEVA, H.A. ZUNINO, M.E. WELLER, A. STAFFORD, S.F. KEIM, University of Nevada, Reno, USA — Foil liners are good objects for the investigation of dissipation mechanism of magnetic energy and as possible alternative loads for wire-arrays at multi-MA generators. Performance of Al planar foils was compared with single planar wire-arrays (SPWAs) in 0.9 – 1.6 MA current region. Using time-gated and time-integrated x-ray, optical and laser diagnostics, the implosion dynamics and radiative characteristics are studied from current start to pinch stagnation. Foils radiate at 80% of the total yield and power of SPWAs. Moreover, anisotropic emission from planar foils was observed similar to SPWAs [V. Kantsyrev *et al.*, Bull. Amer. Phys. Soc., v. 55, 244 (2010)]: the total yield registered orthogonally to the foil plane was higher than along the plane. Possible magnetic energy dissipation mechanism, numerical modeling and future experiments will be discussed. \*This work was supported by NNSA under DOE Cooperative Agreements DE-FC52-06NA27586, DE-FC52-06NA27588, and in part by DE-FC52-06NA27616.

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