

Abstract Submitted
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A Brief Report On Time-integrated Spectrum Measurements From W X-PINCH With 1 KA/NS Current Rate In The Energy Range From 10 TO 20 KEV. ROMAN SHAPOVALOV, RICK SPIELMAN, Idaho State Univ — A unique, compact & portable x-pinch driver was recently fabricated and tested at the Idaho State University [1]. The new driver can supply of about 200-kA peak current into a low inductance x-pinch load with about 1 kA/ns current rate of rise. In this report we present a first time-integrated spectrum measurements from tungsten x-pinches comprised of 2x30-um wires installed in anode-cathode gap with separation distance of about 1.3 cm. The simulation shows that spectrum can be fitted by exponential low with a temperature of about 2.5 keV in the energy range from 10 to 20 keV. 1. R. Shapovalov and R. Spielman, “Shirt-Circuit test data of a new 2-LTD-Brick x-pinch driver at the Idaho Accelerator Center,” in Proc. Pulsed Power Conference (PPC), 2015 IEEE.

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