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CBET Experiments with Wavelength Shifting at the Nike Laser<sup>1</sup> JAMES WEAVER, NRL, P. MCKENTY, LLE/UR, J. BATES, NRL, J. MYATT, J. SHAW, LLE/UR, K. OBENSCHAIN, J. OH, D. KEHNE, S. OBENSCHAIN, NRL, R. H. LEHMBERG, RSI Inc., F. TSUNG, UCLA, A. J. SCHMITT, V. SER-LIN, NRL — Studies conducted at NRL during 2015 searched for cross-beam energy transport (CBET) in small-scale plastic targets with strong gradients in planar, cylindrical, and spherical geometries. The targets were irradiated by two widely separated beam arrays in a geometry similar to polar direct drive. Data from these shots will be presented that show a lack of a clear CBET signature even with wavelength shifting of one set of beams. This poster will discuss the next campaign being planned, in part, with modelling codes developed at LLE. The next experiments will use a target configuration optimized to create stronger SBS growth. The primary path under consideration is to increase scale lengths 5-10x over the previous study by using exploding foils or low density foams. In addition to simulations, the presentation will also discuss improvements to the diagnostic suite and laser operations; for example, a new set of etalons will be available for the next campaign that should double the range of wavelength shifting between the two beam arrays.

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