**Hard X-Ray Bremsstrahlung Measurements:** A spectrometer to diagnose the hot-electron source in high-intensity, laser–solid target interactions has been developed and successfully demonstrated on OMEGA EP. The diagnostic is designed to characterize solid–target interactions at laser energies and pulse durations of up to 2.5 kJ, 5 to 10 ps, and laser intensities between $10^{18}$ to $10^{20}$ W/cm$^2$. This instrument [Fig. 1(a)] combines a stack of differentially filtered image-plate detectors contained inside a lead- and plastic-lined housing. The diagnostic nosepiece incorporates a magnet to deflect electrons away from the entrance aperture and a set of lead collimators. Figure 1(b) shows the hard x-ray spectrum measured during the first OMEGA EP target shot (shot 3676). The target interaction was a single high-intensity laser pulse, delivered by the OMEGA EP sidelighter beam, focused to a planar-copper-foil target. The laser delivered 80 J of energy to target with a pulse duration of 8 ps, providing an on-target intensity of around $1.5 \times 10^{18}$ W/cm$^2$. The target was a $500 \times 500 \times 20$-nm$^3$ copper foil rotated 45° to the sidelighter beam. The hard x-ray spectrometer was located in the forward direction, collinear with the laser propagation direction. The instrument successfully collected data with no saturation. A comparison of the reduction in x-ray signal as a function of image-plate layer inside the filtered image-plate stack with Integrated Tiger Series (ITS) Monte Carlo (MC) electron-photon transport calculations indicates a hot-electron-slope temperature $T_H = 350 \pm 70$ keV. This is in good agreement with the hot-electron temperature that is predicted by the ponderomotive scaling $T_H = 400$ keV.

**OMEGA Operations Summary:** OMEGA conducted 22 target shots in August with an average experimental effectiveness of 97.7%. In the first week of August, six shots were conducted for the DDI NIC campaign by LLE scientists, and LANL scientists conducted eight HEDP target shots. The laboratory was on a voluntary “safety stand down” for three weeks as a result of an accident that took place on 6 August that seriously injured a laboratory employee. After a rigorous safety review and the implementation of corrective actions, OMEGA shot operations resumed on 28 August with an eight-shot focus scan.