Target Plate Profiles During ELM Suppression Experiments on DIII-D,* J.G. Watkins, SNL, T.E. Evans, C. Murphy, GA, M.J. Martin, Cornell U., A. Nelson, U. of St Thomas, M. Jakubowski, KFZ-Juelich; I. Joseph, R.A. Moyer, UCSD, C.J. Lasnier, M.E. Fenstermacher, LLNL – Radial profiles of target plate plasma conditions during ELM suppressed conditions have been measured with the new DIII-D lower divertor Langmuir probe array. ELM suppression was accomplished using n=3 resonant magnetic perturbations [1]. Evidence of the n=3 mode structure of the perturbation can be seen most clearly in the $V_f$ profile on the target plate. The spacing of the multiple peaks in the $V_f$ profile is similar to predictions of the TRIP3D field line integration code. $T_e$ values >100 eV and $V_f$ values down to –150 V were measured. We observe resonant behavior of the target plate parameters near the $q_{95}$ value for maximum magnetic perturbation. Heat flux from the Langmuir probe measurements will be compared with infrared cameras and thermocouples. The resulting sheath power transmission factor profile will be shown.


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