ABSTRACT

The radiative dissipation of divertor target heat flux on DIII–D is shown to greatly exceed the limitations of energy transport dominated by electron thermal conduction parallel to the magnetic field. More than 80% of the power flowing into the outboard divertor is dissipated through radiation with a broad poloidal profile. It is shown that energy transport dominated by convection over a large region of the divertor is consistent with the data.