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We discuss the L-series of certain K3-fibered Calabi-Yau threefolds defined over the rationals. This is part of an on-going joint work with R. Kloosterman and N. Yui about the modularity of such threefolds. The varieties we look at include weighted projective threefolds of diagonal type and quasi-diagonal type. We will construct many Calabi-Yau threefolds with various types of K3-fibrations. (Received September 18, 2007)