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Ralph Morrison* (morrison@math.berkeley.edu), 1810 Bonita Ave, Apartment B, Berkeley, CA 94709, and **Steven J. Miller**. *An Elliptic Curve Test for the L -Functions Ratios Conjecture*.

The Ratios Conjecture gives a heuristic method for predicting the behavior of zeros of L -functions near the central point, and has shown remarkable success whenever applied. Aside from pointing us towards the correct answer, this method highlights features often obscured in direct computation. While predictions are all well and good, at the end of the day we need to verify these heuristics, both for rigorous use of the results and to strengthen the evidence for the Ratios Conjecture. We present our analysis of the Ratios predictions for quadratic twists of elliptic curve L -functions along with our derivation of the actual distributions, and show that they agree up to a power-savings error term. Apart from strengthening the Ratios Conjecture, this result is key in determining effective matrix size for modeling zeros for this family. (Received September 21, 2011)