Amol Kapila\* (amol\_kapila@brown.edu), 2420 Del Lago Drive, Fort Lauderdale, FL 33316, and Stephanie Sapp (sapp.stephanie@gmail.com). On the Two-Sided Power Distribution.

The Two-Sided Power distribution is a relatively new probability distribution introduced by van Dorp and Kotz in 2002. We derive approximate most-powerful critical regions for hypothesis testing, where the underlying distribution is assumed to be a TSP distribution. This serves as a useful illustration of the Neyman-Pearson Lemma. (Received September 15, 2008)