

Testing Exponentiality Against NBURFR (NWURFR) and NBARFR (NWARFR)

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Abstract. In the spirit of Ahmad (2001), moment inequalities for the two classes, new better (worse) than used renewal failure rate NBURFR (NWURFR), and new better (worse) than average renewal failure rate NBARFR (NWARFR) are derived. A new family of test statistics based on these moment inequalities is constructed. This family is used for testing exponentiality against the present classes. It is shown that the performance of the proposed statistics is well in the sense of the asymptotic relative efficiency (ARE) in comparison with tests for other alternative classes contained within the present classes.