Bringing statistical methods for reliability testing in line with the computer age

This volume presents state-of-the-art, computer-based statistical methods for reliability data analysis and test planning for industrial products. Statistical Methods for Reliability Data updates and improves established techniques as it demonstrates how to apply the new graphical, numerical, or simulation-based methods to a broad range of models encountered in reliability data analysis. It includes methods for planning reliability studies and analyzing degradation data, simulation methods used to complement large-sample asymptotic theory, general likelihood-based methods of handling arbitrarily censored data and truncated data, and more. In this book, engineers and statisticians in industry and academia will find:

- A wealth of information and procedures developed to give products a competitive edge
- Simple examples of data analysis computed with the S-PLUS system—for which a suite of functions and commands is available over the Internet
- End-of-chapter, real-data exercise sets
- Hundreds of computer graphics illustrating data, results of analyses, and technical concepts

An essential resource for practitioners involved in product reliability and design decisions, *Statistical Methods for Reliability Data* is also an excellent textbook for on-the-job training courses, and for university courses on applied reliability data analysis at the graduate level.

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WILEY-INTERSCIENCE

John Wiley & Sons, Inc.
Professional, Reference and Trade Group
605 Third Avenue, New York, N.Y. 10158-0012
New York • Chichester • Weinheim
Brisbane • Singapore • Toronto



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