

ISO 11843-7:2025-04 (E)

Capability of detection - Part 7: Methodology based on stochastic properties of instrumental noise

Contents

Page

- Foreword.....iv
- Introductionv
- 1 Scope.....1
- 2 Normative references.....1
- 3 Terms and definitions.....1
- 4 Symbols and abbreviations.....3
- 5 Quantitative analysis and background noise.....4
 - 5.1 Error sources of analysis.....4
 - 5.2 Random processes in background.....4
- 6 Theories for precision.....5
 - 6.1 Precision for intensity differences.....5
 - 6.2 Precision for area measurements.....6
- 7 Estimation of noise parameters.....8
 - 7.1 Fourier transform.....8
 - 7.2 Auto-covariance function.....9
 - 7.3 Difference method.....10
- 8 Procedures for estimation of SD.....11
- Annex A (informative) Derivation of [Formula \(7\)](#).....13
- Annex B (informative) Derivation of [Formula \(11\)](#).....14
- Bibliography.....16