ISO 11843-7:2012-06 (E)

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

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Quantitative analysis and background noise 2
4.1 Error sources of analysis 2
4.2 Random processes in background 3

5 Theories for precision 3
5.1 Theory based on auto-covariance function 3
5.2 Theory based on power spectrum 5

6 Practical use of FUMI theory 9
6.1 Estimation of noise parameters 9
6.2 Procedures for estimation of SD 10

Annex B (informative) Derivation of Formula (7) 14

Annex C (informative) Derivation of Formulae (14) to (16) 15

Bibliography 17