ISO 11843-6:2013-03 (E)

Capability of detection - Part 6: Methodology for the determination of the critical value and the minimum detectable value in Poisson distributed meas urements by normal approximations

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Measurement system and data handling 1

5 Computation by approximation 2
5.1 The critical value based on the normal distribution 2
5.2 Determination of the critical value of the response variable 4
5.3 Sufficient capability of the detection criterion 4
5.4 Confirmation of the sufficient capability of detection criterion 5

6 Reporting the results from an assessment of the capability of detection 6

7 Reporting the results from an application of the method 6

Annex A (informative) Symbols used in ISO 11843-6 7

Annex B (informative) Estimating the mean value and variance when the Poisson distribution is approximated by the normal distribution 9

Annex C (informative) An accuracy of approximations 10

Annex D (informative) Selecting the number of channels for the detector 14

Annex E (informative) Examples of calculations 15

Bibliography 20