ISO 15623:2002-10 (E)

Transport information and control systems - Forward vehicle collision warning systems - Performance requirements and test procedures

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative reference 1

3 Terms and definitions 1

4 Symbols 2

5 Specifications and requirements 3
5.1 Warnings 3
5.2 System classification 4
5.3 Obstacle vehicle detection area and performance 4
5.4 User safety requirements 6
5.5 Human interface requirements 6
5.6 Awareness of system limitations 7

6 Evaluation test method for measuring detection performance 8
6.1 Test target specification 8
6.2 Environmental conditions 8
6.3 Test method for detection zone 8
6.4 Test method for warning distance accuracy 10
6.5 Test method for target discrimination ability 10

Annex A (normative) Basic consideration of collision warning 14

A.1 Basic equation 14
A.2 Scenarios where warning is issued 14
A.3 Evaluation results of T and a 15
A.4 Calculation examples of the warning distance 16
A.5 Design parameter 18

Annex B (normative) Obstacle detection along curves 19

Annex C (normative) Laser radar -- Coefficient of test target 21

C.1 Solid angle, ... 21
C.2 Radiated intensity, I 21
C.3 Intensity of irradiation, E 22
C.4 Coefficient of Test Target, CTT 22

Annex D (normative) Radio wave radar test target geometry 24

Bibliography 25