ISO 14791:2000-04 (E)

Road vehicles - Heavy commercial vehicle combinations and articulated buses - Lateral stability test methods

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Test objectives 2

5 Measuring equipment 4
5.1 Description 4
5.2 Transducer installation 4
5.3 Data processing 5

6 Test conditions 6
6.1 Test tracks 6
6.2 Tyres 6
6.3 Operating components 7
6.4 Loading conditions 7

7 Test method 7
7.1 Warm-up 7
7.2 Test speed 7
7.3 Lateral acceleration 8
7.4 Pseudo-random input 8
7.5 Single lane-change 8
7.6 Pulse input 9

8 Data analysis and presentation 12
8.1 Preliminary analysis 12
8.2 Rearward amplification 12
8.3 Offtracking 13
8.4 Zero-damping speed and yaw damping 13
8.5 Yaw-velocity ratio 14

Annex A (normative) General data sheet 16

Annex B (normative) Presentation of results 19

Annex C (informative) Technique and verification for path-following 22

Annex D (informative) Calculation of confidence interval for the rearward amplification 25

Bibliography 26