DIN EN 15153-1:2007-08 (E)

Railway applications - External visible and audible warning devices for high speed trains - Part 1: Head, marker and tail lamps

Contents

Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Terms and definitions 4

4 Symbols and abbreviations 5

5 Requirements 5
5.1 General 5
5.2 Provision of lamps 5
5.3 Head lamps 6
5.4 Marker lamps 7
5.5 Tail lamps 9
5.6 Control of lamps 10
5.7 Operational check 10

6 Test methods 10
6.1 Colorimetric tests 10
6.2 Photometric tests 12

Annex A (informative) Summary of testing requirements 14

Annex B (informative) A-deviations 15

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 96/48/EC as amended by Directive 2004/50/EC 16

Bibliography 17

Table 1 -- Colour range intersection point 6

Table 2 -- Luminous intensities of head lamps 6

Table 3 -- Luminous intensities along set angles 7

Table 4 -- Colour range intersection points 7

Table 5 -- Colour ratios 8

Table 6 -- Luminous intensities for lower marker lamps 8

Table 7 -- Colour range intersection points 9

Table 8 -- Luminous intensities for tail lamps 9

Table 9 -- Ageing period for different light source types 11

Table A.1 -- Interoperability constituent and subsystem testing requirements 14

Table ZA -- Correspondence between this European Standard and Directive 96/48/EC 15