
**Cycles — Lighting and retro-
reflective devices —**

**Part 2:
Retro-reflective devices**

*Cycles — Dispositifs d'éclairage et dispositifs rétro réfléchissants —
Partie 2: Dispositifs rétro réfléchissants*



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

| | Page |
|--|-----------|
| Foreword | iv |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 4 General | 2 |
| 4.1 Symbols and units used | 2 |
| 4.2 Chronological order of tests (only for reflectors) | 3 |
| 5 Photometrical requirements | 4 |
| 5.1 Reflectors | 4 |
| 5.2 Retro-reflective tyres | 6 |
| 5.3 Retro-reflective spokes or spoke cases | 7 |
| 6 Colorimetric requirements | 8 |
| 7 Physical requirements | 9 |
| 7.1 Reflectors | 9 |
| 7.1.1 Construction | 9 |
| 7.1.2 Test methods | 9 |
| 7.2 Retro-reflective tyres | 10 |
| 7.2.1 Form and location | 10 |
| 7.2.2 Test methods | 10 |
| 7.3 Retro-reflective spokes or spoke cases | 12 |
| 7.3.1 Construction | 12 |
| 7.3.2 Test methods | 12 |
| 8 Photometric test | 13 |
| 8.1 General | 13 |
| 8.1.1 Instrumentation arrangement | 13 |
| 8.1.2 Source of illumination | 14 |
| 8.1.3 Receiver | 14 |
| 8.1.4 Observation distance | 14 |
| 8.1.5 Illuminance at the reflector | 14 |
| 8.2 Reflectors | 14 |
| 8.2.1 Principle | 14 |
| 8.2.2 Reflector mount (or support) | 14 |
| 8.2.3 Test area of reflector | 15 |
| 8.2.4 Orientation of reflector | 15 |
| 8.3 Retro-reflective tyres | 15 |
| 8.3.1 Principle | 15 |
| 8.3.2 Test method | 15 |
| 8.4 Retro-reflective spokes or spoke cases | 15 |
| 8.4.1 Testing assemblies for retro-reflective spokes and spoke cases | 15 |
| 8.4.2 Test method | 16 |
| 9 Colorimetric test | 16 |
| 9.1 Instrumental measurements | 16 |
| 9.2 Visual comparison | 17 |
| 9.3 Use of methods | 17 |
| 10 Marking | 17 |
| Bibliography | 18 |