DIN EN ISO 4892-1:2026-09 (E)

Plastics - Methods of exposure to laboratory light sources - Part 1: General guidance and requirements (ISO 4892-1:2024, Corrected version 2026-02)

Contents

Page

Foreword ... **iv**

Introduction ... **vi**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Principle ... **3**
4.1 General ... 3
4.2 Significance ... 3
4.3 Use of accelerated tests with laboratory light sources ... 5

5 Requirements for laboratory exposure devices ... **6**
5.1 Irradiance ... 6
5.2 Temperature ... 7
5.3 Humidity and wetting ... 10
5.4 Other requirements for the exposure device ... 11

6 Test specimens ... **11**
6.1 Form, shape and preparation ... 11
6.2 Number of test specimens ... 12
6.3 Storage and conditioning ... 12

7 Test conditions and procedure ... **13**
7.1 Set points for exposure conditions ... 13
7.2 Property measurements on test specimens ... 14
7.3 Sampling for intermediate and final evaluation ... 14

8 Periods of exposure and evaluation of test results ... **14**
8.1 General ... 14
8.2 Use of control materials ... 14
8.3 Use of results in specifications ... 15

9 Test report ... **15**

Annex A (normative) **Procedures for measuring the irradiance uniformity in the specimen exposure area** ... **18**

Annex B (informative) **Factors that decrease the degree of correlation between artificial accelerated weathering or artificial accelerated irradiation exposures and actual-use exposures** ... **21**

Annex C (informative) **Solar spectral irradiance standards** ... **24**

Bibliography ... **27**