

TNI	Plasty Parametre porovnávajúce spektrálnu intenzitu žiarenia laboratórneho svetelného zdroja na použitie na poveternostné starnutie s referenčnou spektrálnou intenzitou slnečného žiarenia (ISO/TR 18486: 2016)	TNI CEN ISO/TR 18486 64 0153
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Plastics - Parameters comparing the spectral irradiance of a laboratory light source for weathering applications to a reference solar spectral irradiance (ISO/TR 18486:2016)

Táto technická normalizačná informácia obsahuje anglickú verziu CEN ISO/TR 18486:2017, ISO/TR 18486:2016.
This Technical standard information includes the English version of CEN ISO/TR 18486:2017,
ISO/TR 18486:2016.

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Plastics - Parameters comparing the spectral irradiance of a laboratory light source for weathering applications to a reference solar spectral irradiance (ISO/TR 18486:2016)

Plastiques - Paramètres de comparaison de la distribution spectrale d'une source de lumière de laboratoire pour les applications de vieillissement et d'une distribution spectrale solaire de référence (ISO/TR 18486:2016)

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CEN ISO/TR 18486:2017 (E)

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European foreword

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The text of ISO/TR 18486:2016 has been approved by CEN as CEN ISO/TR 18486:2017 without any modification.

TECHNICAL REPORT

**ISO/TR
18486**

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Plastics — Parameters comparing the spectral irradiance of a laboratory light source for weathering applications to a reference solar spectral irradiance

Plastiques — Paramètres de comparaison de la distribution spectrale d'une source de lumière de laboratoire pour les applications de vieillissement et d'une distribution spectrale solaire de référence



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ISO/TR 18486:2016(E)**Foreword**

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 6, *Ageing, chemical and environmental resistance*.

Introduction

Laboratory radiation sources generate radiation which is intended to simulate a defined „reference sun“ as perfect as possible, where the fitting to the spectral irradiance in the materials sensitive range is most important. So far, the fitting is described verbally only, e.g. standards concerning artificial weathering, and the user has to decide for himself if the spectral irradiance $E(\lambda)$ indicated by the producer of the laboratory radiation source agrees suitable enough with the „reference sun“ for his specific application or, occasionally, the classification describes the fitting to a wanted „reference sun“ only insufficiently (e.g. for standard weathering tests).

This Technical Report deals with a procedure for the determination of objective factors characterizing the grade of fitting in quantity.

One procedure describes the grade of fitting of a laboratory radiation source to the defined reference sun for specific spectral ranges. A second procedure results in characterizing parameters for the respective wavelength ranges, incorporating known action spectra.

Plastics — Parameters comparing the spectral irradiance of a laboratory light source for weathering applications to a reference solar spectral irradiance

1 Scope

This Technical Report specifies a calculation method which allows calculating a parameter which compares the spectral irradiance of a laboratory radiation source for weathering application to a reference solar spectral irradiance.

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