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Aerospace series - Measurement methods regarding the lifetime behaviour of light units in a standardized aircraft-related environment

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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EN 4705

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English Version

**Aerospace series - Measurement methods regarding the
lifetime behaviour of light units in a standardized aircraft-
related environment**

Série aérospatiale - Méthodes de mesure du
comportement lié à la durée de vie des systèmes
d'éclairage dans un environnement normalisé destiné
aux aéronefs

Luft- und Raumfahrt - Messverfahren zur Bestimmung
der Lebenszeit von Leuchten in einem standardisierten
luftfahrzeugnahen Umfeld

This European Standard was approved by CEN on 14 July 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 4705:2020) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2020, and conflicting national standards shall be withdrawn at the latest by August 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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EN 4705:2020 (E)**Introduction**

The light output of all light sources decreases over time and also the chromaticity coordinates may change. Because of a longer lifetime of modern light sources, like LEDs, a brightness decrease or a chromaticity locus shift can be expected more often than a complete failure of the light source.

This document is applicable to all kind of aircraft cabin light sources including those with means for ageing compensation.

1 Scope

This document describes the measurement method for the lifetime behaviour of aircraft cabin light units in a standardized aircraft-related environment.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 4706, *Aerospace series — LED colour and brightness ranking*¹

EN 13032-4, *Light and lighting — Measurement and presentation of photometric data of lamps and luminaires — Part 4: LED lamps, modules and luminaires*

IES LM-80-08, *Approved Method: Measuring Lumen Maintenance of LED Light Sources*²

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

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² Published by Illumination Engineering Society (IES), 120 Wall Street, Floor 17, New York NY 10005-4001, USA