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Aerospace series - Elements of electrical and optical connection - Test methods - Part 100: General

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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ICS 49.060, 49.090

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EUROPEAN STANDARD

EN 2591-100

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 49.060; 49.090

Supersedes EN 2591-100:2018

English Version

Aerospace series - Elements of electrical and optical connection - Test methods - Part 100: General

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 100 : Généralités

Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 100: Allgemeines

This European Standard was approved by CEN on 3 June 2024.

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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 2591-100:2024) has been prepared by ASD-STAN.

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

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2025, and conflicting national standards shall be withdrawn at the latest by April 2025.

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.

This document supersedes EN 2591-100:2018.

The main changes with respect to the previous edition are as follows:

- EN 2591-100 (P2), 08/2018:
 - o update of the test requirements for fibre end preparation and light launch conditions for various sizes and types of fibres;
 - o addition of new test requirements for light detection systems.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this document: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This document specifies the general requirements for the methods of testing elements of electrical, optical and data transmission system connections used in aerospace applications.

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 2083, *Aerospace series — Copper or copper alloys conductors for electrical cables — Product standard*

EN 2084, *Aerospace series — Cables, electrical, general purpose, with conductors in copper or copper alloy — Technical specification*

EN 2234, *Aerospace series — Cables, electrical, fire-resistant — Technical specification*

EN 2346,¹ *Aerospace series — Fire resistant electrical cables — Dimensions, conductor resistance and mass*

EN 3745-100, *Aerospace series — Fibres and cables, optical, aircraft use — Test methods — Part 100: General*

EN 3745-201, *Aerospace series — Fibres and cables, optical, aircraft use — Test methods — Part 201: Visual examination*

EN 4641-100, *Aerospace series — Cables, optical 125 µm diameter cladding — Part 100: Tight structure 62,5/125 µm core GI fibre 1,8 mm outside diameter — Product standard*

EN 4641-301, *Aerospace series — Cables, optical 125 µm diameter cladding — Part 301: Tight structure 50/125 µm GI, fibre nominal 1,8 mm outside diameter — Product standard*

EN 60793-1-43, *Optical fibres — Part 1-43: Measurement methods and test procedures — Numerical aperture measurement (IEC 60793-1-43)*

EN IEC 60512-1, *Connectors for electronic equipment — Tests and measurements — Part 1: General (IEC 60512-1:2001)*

EN IEC 60793-1-45, *Optical fibres — Part 1-45: Measurement methods and test procedures — Mode field diameter (IEC 60793-1-45)*

IEC 60050-581, *International Electrotechnical Vocabulary — Part 581: Electromechanical components for electronic equipment*

¹ Published as ASD-STAN prEN at the date of publication of this document, available at: <https://www.asd-stan.org/>.