SLOVENSKI STANDARD
SIST EN 2591-6303:2004

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Aerospace series - Elements of electrical and optical connection - Test methods - Part 6303: Optical elements - Cold/low pressure and damp heat

Aerospace series - Elements of electrical and optical connection - Test methods - Part 6303: Optical elements - Cold/low pressure and damp heat

Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 6303: Optische Elemente - Kälte/niedriger Luftdruck und feuchte Wärme

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 6303 : Organes optiques - Froid/basse pression et chaleur humide

Ta slovenski standard je istoveten z: EN 2591-6303:2001

ICS:

49.060	Letalska in vesoljska elektriḷ na oprema in sistemi	Aerospace electric equipment and systems

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EUROPEAN STANDARD

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English version

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This European Standard was approved by CEN on 4 June 2001.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

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Ref. No. EN 2591-6303:2001 E

Foreword

This European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After inquiries 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 AECMA, 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 May 2002, and conflicting national standards shall be withdrawn at the latest by May 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies a method of checking the long term stability of optical connection elements (including permanent connections) and fibre optic couplers.

It shall be used together with EN 2591-100.

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 2591-100	Aerospace series – Elements of electrical and optical connection – Test methods – Part 100: General [1)]
EN 2591-303	Aerospace series – Elements of electrical and optical connection – Test methods – Part 303: Cold/low pressure and damp heat
EN 2591-601	Aerospace series – Elements of electrical and optical connection – Test methods – Part 601: Optical elements – Insertion loss
EN 2591-602	Aerospace series – Elements of electrical and optical connection – Test methods – Part 602: Optical elements – Variation of attenuation and optical discontinuity
EN 2591-6101	Aerospace series – Elements of electrical and optical connection – Test methods – Part 6101: Optical elements – Visual examination

3 Preparation of specimens

3.1 See EN 2591-303 but omitting the last paragraph. Specimens shall be fitted with normal accessories and terminated in accordance with the product standard. Cavities with unterminated contacts shall have filler plugs fitted (where applicable).

3.2 Unless otherwise indicated in the technical specification, the following details shall be specified:

See EN 2591-303 (if applicable) plus:

- type and length of cable/fibre;
- maximum value of insertion loss;
- maximum permissible variation of attenuation (EN 2591-602 - Method A);
- whether EN 2591-602 is monitored throughout test or at transient stages.

4 Apparatus

See EN 2591-303 and EN 2591-602 plus:

- one or two climatic chambers depending on the method used.

1) Published as AECMA Prestandard at the date of publication of this standard

5 Method

5.1 Climatic preconditioning

See EN 2591-303.

5.2 Initial measurements

See EN 2591-303 plus optical tests as required (EN 2591-601 or EN 2591-602).

5.3 Procedure

Method A (single chamber) see EN 2591-303, figure 1.

Method B (two chambers) see EN 2591-303, figure 2.

Measure the variation of attenuation (EN 2591-602 – Method A) continuously throughout the test.

5.4 Final measurements and requirements

- EN 2591-6101 – Visual examination
- EN 2591-601 – Insertion loss