EESTI STANDARD EVS-EN 2155-9:2000

Lennunduse ja kosmonautika seeria. Läbipaistvate lennukiklaasimise materjalide katsemeetodid. Osa 9: Hägususe määramine

Aerospcae series - Test methods for transparent materials for aircraft glazing - Part 9: Determination of haze

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 2155-9:2000 sisaldab Euroopa standardi EN 2155-9:1989 ingliskeelset teksti.	This Estonian standard EVS-EN 2155-9:2000 consists of the English text of the European standard EN 2155-9:1989.
Standard on kinnitatud Eesti Standardikeskuse 11.01.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 11.01.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

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English version

Aerospace series
Test methods for transparent materials for aircraft glazing
Part 9 : Determination of haze

Série aérospatiale
Méthodes d'essais pour matériaux transparents pour vitrages aéronautiques
Partie 9 : Détermination du flou

Luft- und Raumfahrt
Prüfverfahren für transparente Werkstoffe zur Verglasung von Luftfahrzeugen
Teil 9 : Bestimmung der Trübung

This European Standard was accepted by CEN on 1988-03-17. CEN members are bound to comply with the requirements of CEN 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 Central Secretariat 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 CEN Central Secretariat has the same status as the official versions.

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

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat : Rue Bréderode 2, B—1000 Bruxelles

Brief history

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

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

According to the Common CEN/CENELEC Rules, following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Contents

1 Scope and field of application

This standard specifies the determination of the haze of planar sections of transparent plastics, using a hazemeter based on an integrating sphere. This method is not recommended for the measurement of haze values greater than 30% as determined by this method.

2 Definitions

Haze is defined as the scatter of light from an accumulation of tiny particles within the material, or from very small defects on the surface. This can lead to an obscuration of the view through the material or the spreading of an image beyond its proper limits.

3 Apparatus

3.1 Hazemeter

The apparatus shall consist of a hazemeter, constructed essentially as shown in figure 1 or figure 2.

3.1.1 Integrating sphere

An integrating sphere shall be used to collect the transmitted flux. The sphere may be of any diameter so long as the total port area does not exceed 4% of the internal reflecting area of the sphere.

The entrance and exit ports shall be centred on the same great circle of the sphere and there shall be at least 170° of arc between centres. The exit port shall subtend an angle of 8° at the centre of the entrance port. The axis of the irradiating beam shall pass through the centres of the entrance and exit ports.

The photocell or photocells shall be positioned on the sphere (90 $\pm$ 10)° from the entrance port. In the pivotable model, figure 2, which is designed to use the interior sphere wall adjacent to the exit port as the reflectance standard, the angle of rotation shall not exceed 10°.

3.1.2 Light beam

The specimen shall be illuminated by a substantially unidirectional beam; the maximum angle which any ray of this beam makes with the direction of its axis shall not exceed 3°. The beam shall not be vignetted at either port of the sphere. When the beam is unobstructed by the specimen, its cross section at the exit port shall be approximately circular, sharply defined, and concentric within the exit port, leaving an annulus of (1,3 $\pm$ 0,1)° subtended at the entrance port. When the specimen is placed immediately against the integrating sphere at the entrance port, the angle between the normal to its surface and the axis of the beam shall not exceed 8°.