

This document is a Preview generated by EVS

**Aerospace series - Fibres and cables, optical,  
aircraft use - Test methods - Part 705:  
Contrast measurement**

Aerospace series - Fibres and cables, optical,  
aircraft use - Test methods - Part 705: Contrast  
measurement

**EESTI STANDARDI EESSÕNA****NATIONAL FOREWORD**

<p>Käesolev Eesti standard EVS-EN 3745-705:2008 sisaldab Euroopa standardi EN 3745-705:2007 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 28.01.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 12.12.2007.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 3745-705:2008 consists of the English text of the European standard EN 3745-705:2007.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 28.01.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 12.12.2007.</p> <p>The standard is available from Estonian standardisation organisation.</p>
--	---

ICS 49.060

Võtmesõnad:

**Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele**

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:  
Aru 10 Tallinn 10317 Eesti; [www.evs.ee](http://www.evs.ee); Telefon: 605 5050; E-post: [info@evs.ee](mailto:info@evs.ee)

ICS 49.060

English Version

## Aerospace series - Fibres and cables, optical, aircraft use - Test methods - Part 705: Contrast measurement

Série aérospatiale - Fibres et câbles optiques à usage  
aéronautique - Méthodes d'essais - Partie 705 : Mesure de  
contraste

Luft- und Raumfahrt - Faseroptische Leitungen für  
Luftfahrzeuge - Prüfverfahren - Teil 705: Kontrastmessung

This European Standard was approved by CEN on 25 July 2007.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

## Contents

Page

Foreword.....	3
1 <b>Scope</b> .....	4
2 <b>Normative references</b> .....	4
3 <b>Terms and definitions</b> .....	4
4 <b>Preparation of samples</b> .....	4
5 <b>Test equipment</b> .....	5
6 <b>Process</b> .....	6

## Foreword

This document (EN 3745-705:2007) 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 June 2008, and conflicting national standards shall be withdrawn at the latest by June 2008.

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

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

## 1 Scope

This standard specifies the process to be applied for measuring different colour densities of cable identification markings. It is designed to define a reproducible process of contrast value determination.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 7724-1, *Paints and varnishes — Colorimetry — Part 1: Principles*

CIE 15, *Colorimetry* <sup>1)</sup>

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **contrast**

ratio of reflecting light (here: reflecting light of cable identification marking and cable surface)

### 3.2

#### **illuminance**

reflection of visible light

### 3.3

#### **measuring range**

maximum effective range of measurement

## 4 Preparation of samples

The cable samples shall be identified in compliance with applicable manufacturing instruction using the power density specified in the technical specification. The surfaces of the cable samples shall be clean and without damage.

The identification markings to be measured shall even be in colour and shall have sharply defined marking edges i.e. marks are correctly focussed.

Before starting measurements clean the surfaces with a soft, lint-free cloth to avoid distortion of test results by a roughened surface or "deposits".

---

1) Published by CIE Central Bureau - Kegelgasse 27 - A-1030 Wien - Austria.