

Methods for

Measurement of video tape properties

The European Standard EN 60735:1991 has the status of a
British Standard

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

Cooperating organizations

The European Committee for Electrotechnical Standardization (CENELEC), under whose supervision this European Standard was prepared, comprises the national committees of the following countries:

Austria	Italy
Belgium	Luxembourg
Denmark	Netherlands
Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	United Kingdom

This British Standard, having been prepared under the direction of the Electronic Equipment Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 May 1992

© BSI 10-1999

The following BSI references relate to the work on this standard:
Committee reference EEL/22
Draft for comment 89/29024 DC

ISBN 0 580 20810 9

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
Cooperating organizations	Inside front cover
National foreword	ii
Foreword	2
Text of EN 60735	3
National annex NA (informative)	Inside back cover
National annex NB (informative)	Inside back cover

National foreword

This British Standard has been prepared under the direction of the Electronic Equipment Standards Policy Committee and is the English language version of EN 60735, "*Measuring methods for video tape properties*", published by the European Committee for Electrotechnical Standardization (CENELEC). It was derived by CENELEC from IEC 735:1991 published by the International Electrotechnical Commission (IEC). For ease of publication, some of the figures also include the French text. This British Standard supersedes BS 6412:1983 which will be withdrawn on 15 October 1992.

Copies of CCIR documents may be purchased from BSI Sales, Linford Wood, Milton Keynes MK14 6LE.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 14, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Descriptors: Video recording, magnetic recording, video recorder, magnetic tape, measurement method, mechanical properties, electromagnetic properties, electrical properties

English version

Measuring methods for video tape properties

(IEC 735:1991)

Méthodes de mesure des propriétés des bandes
magnétiques pour magnétoscopes
(CEI 735:1991)

Meßverfahren für die Eigenschaften von
Video-Magnetbändern
(IEC 735:1991)

This European Standard was approved by CENELEC on 1991-09-23. CENELEC 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 Central Secretariat or to any CENELEC 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 CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B-1050 Brussels

Foreword

The text of document 60B(CO)124, as prepared by Sub-committee 60B: Video recording, of IEC Technical Committee No 60: Recording, was submitted to the IEC-CENELEC parallel vote in January 1991.

The reference document was approved by CENELEC as EN 60735 on 23 September 1991.

This European Standard supersedes HD 454 S1:1984.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1992-10-15
- latest date of withdrawal of conflicting national standards (dow) 1992-10-15

For products which have complied with HD 454 S1:1984 before 1992-10-15, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1997-10-15.

Annexes designated “normative” are part of the body of the standard. In this standard, Annex ZA is normative.

Contents

	Page
Foreword	2
1 Scope	3
2 Normative references	3
3 Testing environment	3
4 Mechanical properties	3
4.1 Tape width	3
4.2 Tape thickness	3
4.3 Tensile tests	3
4.4 Residual elongation	3
4.5 Longitudinal shrinkage	3
4.6 Coefficient of elongation in humidity	3
4.7 Transverse cupping	4
4.8 Longitudinal curvature	4
4.9 Coefficient of friction	4
4.10 Layer-to-layer adhesion	4
4.11 Video head wear	5
5 Electromagnetic and electrical properties	5
5.1 Coercivity H_c and retentivity B_r	5
5.2 Coating resistance	5
6 Tape properties measured on a video tape recorder	5
6.1 Video properties	5
6.2 Audio properties	6
Annex ZA (normative) Other international publications quoted in this standard with the references of the relevant european publications	13
Figure 1a — Test system for dynamic measurement of longitudinal curvature	8
Figure 1b — Test system for dynamic measurement of longitudinal curvature	9
Figure 2 — Test system for the measurement of the coefficient of friction	10
Figure 3 — Test system for dynamic measurement of friction	11
Figure 4 — Test system for the measurement of coating resistance	12
Figure 5 — Procedure adopted in the case of difficulties in finding exact peak	12