SLOVENSKI STANDARD
SIST EN 62496-2-2:2011

01-maj-2011

Plošče z optičnimi vezji - Preskusni in merilni postopki - 2-2. del: Meritve: Mere plošč z optičnimi vezji (IEC 62496-2-2:2011)

Optical circuit boards - Test and measurement procedures - Part 2-2: Measurements: Dimensions of optical circuit boards (IEC 62496-2-2:2011)

Optische Leiterplatten - Prüf- und Messverfahren - Teil 2-2: Messverfahren - Abmessungen optischer Leiterplatten (IEC 62496-2-2:2011)

Cartes à circuits optiques - Partie 2-2: Mesures - Dimensions des cartes à circuits optiques (CEI 62496-2-2:2011)

Ta slovenski standard je istoveten z: **EN 62496-2-2:2011**

ICS:

31.180	Tiskana vezja (TIV) in tiskane plošče	Printed circuits and boards
33.180.01	Sistemi z optičnimi vlakni na splošno	Fibre optic systems in general

SIST EN 62496-2-2:2011 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62496-2-2

March 2011

ICS 33.180.01

English version

Optical circuit boards - Part 2-2: Measurements - Dimensions of optical circuit boards

(IEC 62496-2-2:2011)

Cartes à circuits optiques -
Partie 2-2: Mesures -
Dimensions des cartes à circuits optiques
(CEI 62496-2-2:2011)

Optische Leiterplatten -
Teil 2-2: Messungen -
Abmessungen optischer Leiterplatten
(IEC 62496-2-2:2011)

This European Standard was approved by CENELEC on 2011-03-03. 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, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 86/378/FDIS, future edition 1 of IEC 62496-2-2, prepared by IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62496-2-2 on 2011-03-03.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2011-12-03
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2014-03-03

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62496-2-2:2011 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60793-2	NOTE	Harmonized as EN 60793-2.
IEC 62496 series	NOTE	Harmonized in EN 62496 series.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-
IEC 60793-1-45 (mod)	-	Optical fibres - Part 1-45: Measurement methods and test procedures - Mode field diameter	EN 60793-1-45	-
IEC 61189-2	-	Test methods for electrical materials, printed boards and other interconnection structures and assemblies - Part 2: Test methods for materials for interconnection structures	EN 61189-2	-
IEC 62496-2-1	-	Optical circuit boards - Basic test and measurement procedures - Part 2-1: Measurements - Optical attenuation and isolation	FprEN 62496-2-1	-
IEC 62496-4	-	Optical circuit boards - Part 4: Interface standards - General and guidance	FprEN 62496-4	-
ISO 10360-2	-	Geometrical product specifications (GPS) - Acceptance and reverification tests for coordinate measuring machines (CMM) - Part 2: CMMs used for measuring linear dimensions	EN ISO 10360-2	-

IEC 62496-2-2

Edition 1.0 2011-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Optical circuit boards –
Part 2-2: Measurements – Dimensions of optical circuit boards

Cartes à circuits optiques –
Partie 2-2: Mesures – Dimensions des cartes à circuits optiques

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX U

ICS 33.180.01

ISBN 978-2-88912-316-2

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL CIRCUIT BOARDS –

Part 2-2: Measurements – Dimensions of optical circuit boards

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62496-2-2 has been prepared by IEC technical committee 86: Fibre optics.

The text of this standard is based on the following documents:

FDIS	Report on voting
86/378/FDIS	86/385/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 62496 series, published under the general title *Optical circuit boards*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

OPTICAL CIRCUIT BOARDS –

Part 2-2: Measurements – Dimensions of optical circuit boards

1 Scope

This part of IEC 62496 specifies the measurement procedures for dimensions related to interface information of optical circuit boards (OCB), defined in IEC 62496-4.

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.

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 60793-1-45, *Optical fibres – Part 1-45: Measurement methods and test procedures – Mode field diameter*

IEC 61189-2, *Test methods for electrical materials, printed boards and other interconnection structures and assemblies – Part 2: Test methods for materials for interconnection structures*

IEC 62496-2-1, *Optical circuit boards – Part 2-1: Measurements – Optical attenuation and isolation*[1]

IEC 62496-4, *Optical circuit boards – Part 4: Interface standards – General and guidance*

ISO 10360-2, *Geometrical product specifications (GPS) – Acceptance and reverification tests for coordinate measuring machines (CMM) – Part 2: CMMs used for measuring linear dimensions*

3 Terms and definitions

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

3.1
optical position adjusting system
consists of a light source, fibre position adjustment stage, OCB holder, input/output fibre and a power meter. The optimum fibre launch position, at which the optical output power is maximised, is determined through alignment of the input/output fibres to the OCB and monitoring the output power from the OCB

3.2
dimensional drawing
illustration, including dashed lines, which defines classified OCB or OCB body shape accuracy using the origin point or alignment mark as the standard point

---

1 To be published.