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Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Obsahuje: EN 62496-2-4:2013, IEC 62496-2-4:2013

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EN 62496-2-4

August 2013

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English version

**Optical circuit boards -
Basic test and measurement procedures -
Part 2-4: Optical transmission test for optical circuit boards
without input/output fibres
(IEC 62496-2-4:2013)**

Cartes à circuits optiques -
Procédures fondamentales d'essais et de
mesures -
Partie 2-4: Essai de transmission optique
des cartes à circuits optiques sans fibres
d'entrée/sortie
(CEI 62496-2-4:2013)

Optische Leiterplatten -
Grundlegende Prüf- und Messverfahren -
Teil 2-4: Optische Übertragungsprüfung
für optische Leiterplatten ohne Eingangs-
/Ausgangsfasern
(IEC 62496-2-4:2013)

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The text of document 86/449/FDIS, future edition 1 of IEC 62496-2-4, prepared by IEC TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62496-2-4:2013.

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IEC 62496-2-1	NOTE	Harmonised as EN 62496-2-1.
IEC 60793-2	NOTE	Harmonised as EN 60793-2.
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Annex ZA (normative)

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-



INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Optical circuit boards – Basic test and measurement procedures –
Part 2-4: Optical transmission test for optical circuit boards without input/output
fibres**

**Cartes à circuits optiques – Procédures fondamentales d'essais et de mesures –
Partie 2-4: Essai de transmission optique des cartes à circuits optiques sans
fibres d'entrée/sortie**



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CONTENTS

FOREWORD	4
1 Scope	6
2 Normative references	6
3 Terms, definitions and abbreviations	6
3.1 Terms and definitions	6
3.2 Abbreviations	7
4 Measurement conditions	7
5 Inspection methods	8
5.1 Equipment	8
5.1.1 Light source system	9
5.1.2 Observation system	10
5.1.3 Data processing unit	11
5.1.4 Unit for holding the sample	12
5.2 Measurement procedures of relative optical loss	12
5.2.1 Preparation of light source	12
5.2.2 Preparation of the optical observation system measuring equipment	13
5.2.3 Measuring coordinates of I/O ports	13
5.2.4 Capturing of optical images for control sample and samples to be measured	13
5.2.5 Image data processing (detection of I/O port range)	14
5.2.6 Calculation of relative loss	14
5.3 Evaluation of pass or fail	15
Annex A (informative) Example of an optical transmission test for an OCB without I/O fibres	16
Annex B (informative) Measurement of input and output ports in offset positions	19
Bibliography	21
Figure 1 – Optical transmission test system without I/O fibres for surface I/O type OCB	8
Figure 2 – Optical transmission test system without I/O fibres for end-face I/O type OCB	9
Figure 3 – Schematic diagram of measurement of uniformity of illumination area	10
Figure 4 – Example of obtained uniformity of illumination area	10
Figure 5 – Example of obtained sensitivity of an image sensor (input uniformity within 1 %)	11
Figure 6 – Position alignment of light source	13
Figure 7 – Example of captured image and extracted I/O port range by image binarization	14
Figure 8 – Calculation of the total detected intensity of extracted I/O port range from detected intensity for each pixel	15
Figure A.1 – Example of relative optical loss measurement	17
Figure A.2 – Example of reproducibility of relative optical loss measurement	18
Figure B.1 – Ray traces for OCBs with mirror having designated mirror angle (left) and not designated one (right)	19
Figure B.2 – Difference of focus positions between without offset and with offset	20
Figure B.3 – Optical images at surface of OCB plane (without offset) and offset position (with offset)	20

Table A.1 – Observation system	16
Table A.2 – Light source	16
Table A.3 – Samples to be measured.....	16

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**OPTICAL CIRCUIT BOARDS –
BASIC TEST AND MEASUREMENT PROCEDURES –**
**Part 2-4: Optical transmission test for optical circuit boards
without input/output fibres**
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International Standard IEC 62496-2-4 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
86/449/FDIS	86/456/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.

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OPTICAL CIRCUIT BOARDS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 2-4: Optical transmission test for optical circuit boards without input/output fibres

1 Scope

This part of IEC 62496 specifies the test method to decide whether to pass or fail an optical circuit board using direct illumination by a light. The input ports are directly illuminated and the optical intensity from the output ports of the optical circuit board is monitored using an area image sensor. Excess optical losses are calculated from total detected intensities of light from a sample to be measured and from a control sample. This method is used to illuminate uniformly the input port of the optical circuit board (OCB) with a larger area than the core area, obtain the radiance of an area image from the corresponding output port of the OCB using an area image sensor, and evaluate whether to pass or fail using the radiance obtained compared to that of a control sample.

The advantage of this test method is that the alignment procedure between a launch fibre and the OCB is not necessary.

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