

Optical circuit boards - Part 2-1: Measurements - Optical attenuation and isolation

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 62496-2-1:2011 sisaldab Euroopa standardi EN 62496-2-1:2011 ingliskeelset teksti.

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English version

**Optical circuit boards -
Part 2-1: Measurements -
Optical attenuation and isolation
(IEC 62496-2-1:2011)**

Cartes à circuits optiques -
Partie 2-1: Mesures -
Affaiblissement et isolation optiques
(CEI 62496-2-1:2011)

Optische Leiterplatten -
Teil 2-1: Messungen -
Optische Dämpfung und Isolation
(IEC 62496-2-1:2011)

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

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Foreword

The text of document (86/396/FDIS), future edition 1 of IEC 62496-2-1, prepared by IEC TC 86, "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62496-2-1:2011.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2012-06-01
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2014-09-01

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Endorsement notice

The text of the International Standard IEC 62496-2-1:2011 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 60793-1-1	NOTE	Harmonized as EN 60793-1-1.
IEC 60794-1-1	NOTE	Harmonized as EN 60794-1-1.
IEC 61280-4-1	NOTE	Harmonized as EN 61280-4-1.
IEC 61300-3-35	NOTE	Harmonized as EN 61300-3-35.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60793-2-10	-	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN 60793-2-10	-
IEC 60793-2-50	-	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	-
IEC 60825-1	-	Safety of laser products - Part 1: Equipment classification and requirements	EN 60825-1	-
IEC 61300-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 1: General and guidance	EN 61300-1	-
IEC 61300-3-1	2005	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-1: Examinations and measurements - Visual examination	EN 61300-3-1	2005
IEC 61300-3-4	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-4: Examinations and measurements - Attenuation	EN 61300-3-4	-
IEC 62496-1	2008	Optical circuit boards - Part 1: General	EN 62496-1	2009
IEC 62614	-	Fibre optics - Launch condition requirements for measuring multimode attenuation	EN 62614	-
ISO 3599	-	Vernier callipers reading to 0,1 and 0,05 mm	-	-
ISO 6906	-	Vernier callipers reading to 0,02 mm	-	-

CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Precautions	6
4 Apparatus.....	7
4.1 Launch conditions and source (S)	7
4.2 Power-meter (D).....	7
4.3 Optical fibre (OF)	8
4.4 Mode filter (MF).....	8
4.5 Optical direction changing device (OD).....	9
4.6 Temporary joint (TJ).....	9
5 Procedure	10
5.1 Pre-conditioning	10
5.2 Visual inspection	11
5.3 Connectivity inspection.....	11
5.4 OCB configurations and measurement methods	11
5.5 Attenuation measurement with a power-meter	13
5.5.1 General	13
5.5.2 Cut-back method	13
5.5.3 Insertion method (A).....	15
5.5.4 Insertion method (B).....	23
5.6 Isolation measurement with a power-meter.....	25
5.6.1 Insertion method (C).....	26
5.6.2 Insertion method (D).....	31
5.7 Mirror loss measurement.....	32
6 Details to be specified	33
Bibliography.....	34
Figure 1 – Launch apparatus for butt-joint connection, (a) without OD, (b) with OD.....	10
Figure 2 – Cut-back method – Configuration A.....	14
Figure 3 – Cut-back method – Configuration B.....	15
Figure 4 – Insertion method (A) – Configuration A	16
Figure 5 – Insertion method (A), multi port sequential measurements – Configuration A	17
Figure 6 – Insertion method (A) – Configuration B	18
Figure 7 – Insertion method (A) – Configuration C-1	19
Figure 8 – Insertion method (A) – Configuration C-2	20
Figure 9 – Insertion method (A) – Configuration D	21
Figure 10 – Insertion method (A) – Configuration E.....	22
Figure 11 – Insertion method (A) – Configuration E.....	23
Figure 12 – Insertion method (B) – Configuration A.....	24
Figure 13 – Insertion method (B) – Configuration C-1	25
Figure 14 – Insertion method (C) – Configuration A	26
Figure 15 – Insertion method (C) – Configuration B	27
Figure 16 – Insertion method (C) – Configuration C-1	28

Figure 17 – Insertion method (C) – Configuration D	29
Figure 18 – Insertion method (C) – Configuration E	30
Figure 19 – Insertion method (C) – Configuration E	31
Figure 20 – Insertion method (D) – Configuration A	32
Figure 21 – Mirror loss measurement	33
Table 1 – Preferred source and launch conditions	7
Table 2 – Preferred launching and receiving fibres	8
Table 3 – Measurement methods of attenuations	11
Table 4 – Measurement methods of isolations	12

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OPTICAL CIRCUIT BOARDS –

Part 2-1: Measurements – Optical attenuation and isolation

1 Scope

IEC 62496-2-1 describes the various methods to measure the optical attenuation and isolation of optical circuit boards (OCBs).

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 60793-2-10, *Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres*

IEC 60793-2-50, *Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres*

IEC 60825-1, *Safety of laser products – Part 1: Equipment classification and requirements*

IEC 61300-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 1: General and guidance*

IEC 61300-3-1:2003, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-1: Examinations and measurements – Visual examination*

IEC 61300-3-4, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-4: Examinations and measurements – Attenuation*

IEC 62496-1:2008, *Optical circuit boards – Part 1: General*

IEC 62614, *Fibre optics – Launch condition requirements for measuring multimode attenuation*

ISO 3599, *Vernier callipers reading to 0,1 and 0,05 mm*

ISO 6906, *Vernier callipers reading to 0,02 mm*

3 Precautions

The requirements of IEC 60825-1 and the following test requirements shall be met.

The position of the fibres in the test should be fixed during the measurement to avoid changes in attenuation caused by bending loss.