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**Optical circuit boards – Basic test and measurement procedures –
Part 2-5: Flexibility test for flexible opto-electric circuits**

**Cartes à circuits optiques – Procédures fondamentales d'essais et de mesures –
Partie 2-5: Essai de flexibilité pour les circuits optoélectriques souples**



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**OPTICAL CIRCUIT BOARDS –
BASIC TEST AND MEASUREMENT PROCEDURES –**
Part 2-5: Flexibility test for flexible opto-electric circuits

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IEC 62496-2-5 has been prepared by IEC technical committee 86: Fibre optics. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
86/605/FDIS	86/609/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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

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OPTICAL CIRCUIT BOARDS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 2-5: Flexibility test for flexible opto-electric circuits

1 Scope

This part of IEC 62496 defines a test method for folding flexibility inspection of flexible opto-electric circuits with a flexibility tester endurance tester and presents a guideline for a step stress test method for finding the predetermined minimum mechanical folding radii below which the flexible opto-electric circuits can be damaged by intended folding distortion. Here, test samples are used instead of products for the flexibility test of their flexible opto-electric circuits, and the test samples have the same material, layer structure, processing technology and equipment as the products.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60793-2 (all parts), *Optical fibres – Part 2: Product specifications*

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

ISO 5626:1993, *Paper – Determination of folding endurance*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62496-1 and the following apply.

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flexible opto-electric circuit board

flexible circuit board that contains both optic and electric circuits integrated into a flexible sheet