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Fixed folding durability test method for flexible opto-electric circuit boards

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

Draft	Report on voting
91/2125/FDIS	91/2147/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/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,
– withdrawn, or
– revised.

1 Scope

This document defines the test method for providing uniform quality fixed folding durability test data to opto-electric wiring users. In particular, it provides a test condition for the tension and free tension folded state of the flexible opto-electric circuit boards of optic fibre type.

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

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

3 Terms and definitions

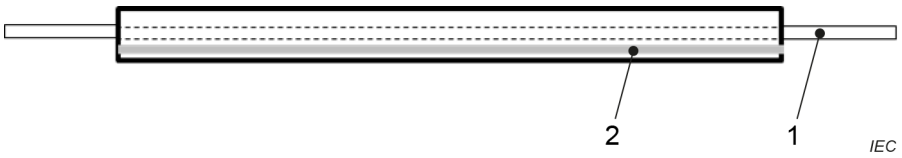
For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

– IEC Electropedia: available at https://www.electropedia.org/

– ISO Online browsing platform: available at https://www.iso.org/obp

3.1
flexible opto-electric circuit board
FOECB
flexible circuit board that contains both optic and electric circuits integrated into a flexible sheet



Key

1 optic circuit

2 electric circuit

Figure 1 – Schematic diagram of FOECB (side view)

Note 1 to entry: Figure 1 shows an example of the top view of a flexible opto-electric circuit board.

3.2
fixed folding durability limit time
total time taken for a test specimen to fail under certain fixed folded conditions