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Flexible displays -
Part 6-42: Mechanical test methods - Flattening force measurement methods for rollable display devices

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Flexible displays - Part 6-42: Mechanical test methods - Flattening force measurement methods for rollable display devices

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IEC 62715-6-42 has been prepared by IEC technical committee 110: Electronic displays. It is an International Standard.

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

Draft	Report on voting
110/1843/FDIS	110/1855/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.

A list of all parts in the IEC 62715 series, published under the general title *Flexible displays*, can be found on the IEC website.

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– reconfirmed,

– withdrawn, or

– revised.

1 Scope

This part of IEC 62715 specifies the standard measurement conditions and methods for determining the flattening force of rollable display devices when stretched to a flat state. This document applies to display panels and modules that are rollable along a single axis or a double axis.

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 62715-6-1:2018, *Flexible display devices - Part 6-1: Mechanical test methods - Deformation tests*

3 Terms, definitions and abbreviated terms

3.1 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

3.1.1
flattening force
force required to stretch a rollable display from a crimped state to a flat state

Note 1 to entry: The display device is considered to be in a flat state when the arching height is less than a specified value, e.g. 1 mm, which is determined by the supply and requisitioning parties.

3.1.2
rollable display
flexible display that can be rolled around a specific reel and unrolled when a larger display area is required

3.2 Abbreviated terms

DUT device under test

4 Standard atmospheric conditions

The standard atmospheric conditions in IEC 62715-6-1:2018, Clause 4, shall apply as follows, unless otherwise specifically agreed between customer and supplier.

– temperature: 25 °C ± 3 °C,

– relative humidity: 25 % RH to 85 % RH,

– atmospheric pressure: 86 kPa to 106 kPa.

When different environmental conditions are used, they shall be reported in detail in the specification.