

INTERNATIONAL STANDARD



**Liquid crystal display devices –
Part 30-5: Optical measuring methods of transmissive transparent LCD modules**





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LIQUID CRYSTAL DISPLAY DEVICES –

Part 30-5: Optical measuring methods of transmissive transparent LCD modules

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International Standard IEC 61747-30-5 has been prepared by IEC technical committee 110: Electronic display devices.

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

FDIS	Report on voting
110/1047/FDIS	110/1070/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 61747 series, under the general title *Liquid crystal display devices*, can be found on the IEC website.

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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LIQUID CRYSTAL DISPLAY DEVICES –

Part 30-5: Optical measuring methods of transmissive transparent LCD modules

1 Scope

This part of IEC 61747 specifies the standard measurement conditions and measuring methods for determining the optical properties of transparent liquid crystal display modules which operate in a transmissive mode.

More specifically, this document focuses on three particular aspects of the transparent properties, i.e. transmittance, haze, and image distortion.

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 61747-1-2, *Liquid crystal display devices – Part 1-2: Generic – Terminology and letter symbols*

IEC 61747-30-1, *Liquid crystal display devices – Part 30-1: Measuring methods for liquid crystal display modules – Transmissive type*

ISO 11664-1, *Colorimetry – Part 1: CIE standard colorimetric observers*

ISO 11664-2, *Colorimetry – Part 2: CIE standard illuminants*

ISO 14782, *Plastics: Determination of haze for transparent materials*

3 Terms, definitions, symbols and units

For the purposes of this document, the terms, definitions, symbols and units given in IEC 61747-1-2, as well as the following apply.

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

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

transparent liquid crystal display module

direct-view liquid crystal display module that can show the information on the screen and allow real objects to be viewed through the screen

3.2

on-screen property

visual properties when the focus of the viewer is on the display screen