



IEC 61747-20-1

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# INTERNATIONAL STANDARD

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**Liquid crystal display devices –  
Part 20-1: Visual inspection – Monochrome liquid crystal display cells  
(excluding all active matrix liquid crystal display cells)**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**LIQUID CRYSTAL DISPLAY DEVICES –****Part 20-1: Visual inspection – Monochrome liquid crystal display cells (excluding all active matrix liquid crystal display cells)**

## FOREWORD

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International Standard IEC 61747-20-1 has been prepared by IEC technical committee 110: Electronic display devices.

This first edition cancels and replaces Clause 6 of the first edition of IEC 61747-5 published in 1998. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) The editorial modifications were done in accordance with the ISO/IEC Directives, Part 2, Ed. 6.0:2011.
- b) The document number was changed to align with the new numbering structure of the IEC 61747 series.

NOTE It is intended that the other clauses of IEC 61747-5:1998 will be replaced by new parts in the IEC 61747 series. The details of the intended changes are given in Annex D of IEC 61747-30-1:2012.

The text of this standard is based on the following documents:

CDV	Report on voting
110/522/CDV	110/558A/RVC

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

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

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

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

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- withdrawn,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

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

## INTRODUCTION

This part of IEC 61747 facilitates the visual inspection of image defects of monochrome LCD cells by human eyes subjectively. Visual inspection is performed at specified conditions and criteria. The objective measurement method of visual image defect with an instrument will be studied and standardized.

## LIQUID CRYSTAL DISPLAY DEVICES –

### Part 20-1: Visual inspection – Monochrome liquid crystal display cells (excluding all active matrix liquid crystal display cells)

#### 1 Scope

This part of IEC 61747 gives the details of testing and provides general rules for visual inspection of the non-active and active area of monochrome liquid crystal display cells by the human eye, if necessary, through an optical microscope. Furthermore this standard includes defect definitions and the methods for visual defect inspection.

NOTE Restrictions on defect types, number, and sizes are specified in the quality contract (customer acceptance specification and incoming inspection specification).

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61747-1-2:2014, *Liquid crystal display devices – Part 1-2: Generic – Terminology and letter symbols*

IEC 61747-10-2:2014, *Liquid crystal display devices – Part 10-2: Environmental, endurance and mechanical test methods – Environmental and endurance*