

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

(Not to be reproduced without the permission of BIS or used as an Indian Standard)

मसौदा भारतीय मानक
लिक्विड क्रिस्टल डिस्प्ले डिवाइस –
भाग 30: लिक्विड क्रिस्टल डिस्प्ले मॉड्यूल के लिए मापने के तरीके -
अनुभाग 1: ट्रांसमिसिव प्रकार

Draft Indian Standard

*Liquid Crystal Display Devices –
Part 30: Measuring Methods for Liquid Crystal Display Modules –
Section 1: Transmissive Type*

ICS 31.120

©BIS 2024

©IEC 2012

LITD 04 Electronic Display Devices and
systems Sectional Committee

Last Date for Comments: 19 Nov 2024.

NATIONAL FOREWORD

(Formal clauses will be added later)

This Draft Indian Standard (Part 30/Sec 1) which is identical with IEC 61747-30-1:2012 ‘Liquid crystal display devices - Part 30-1: Measuring methods for liquid crystal display modules - Transmissive type’ issued by the International Electrotechnical Commission (IEC) *will be* adopted by the Bureau of Indian Standards on the recommendation of the Electronic Display Devices and systems Sectional Committee (LITD 04) and approval of the Electronics and Information Technology Division Council.

IS 15934 (Part 6): 2014 was originally published in 2014 and was identical with IEC 61747-6: 2004 ‘Liquid crystal and solid-state display devices — Part 6: Measuring methods for liquid crystal modules – Transmissive type ‘issued by the International Electrotechnical Commission. This superseding is being done to align it with the exiting version of IEC 61747-30-1:2012. On publication of this Standard (Part 30/Sec 1), IS 15934 (Part 6): 2014 stand withdrawn.

The other parts in this series are:

Part 1-1: Generic Specification

Part 2: Liquid Crystal Display Modules Sectional Specification

Part 3: Liquid Crystal Display LCD Cells Sectional Specification

Part 4: Liquid Crystal Display Modules and Cells Essential Ratings and Characteristics

Part 5: Environmental, Endurance and Mechanical Test Methods

Part 10-1: Environmental, Endurance and Mechanical Test Methods- Mechanical

The text of IEC Standard *will be* approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appears referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International standards	Corresponding Indian standards	Degree of Equivalence
IEC 60050 (All Parts), International Electrotechnical Vocabulary	IS 1885 (All Parts) Electrotechnical vocabulary	Modified/Technically Equivalent

The technical committee has reviewed the provisions of the following International Standard referred in this adopted draft standard and has decided that it is acceptable for use in conjunction with this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International Standards	Title
IEC 61747-1	Liquid crystal and solid-state display devices – Part 1: Generic specification
IEC 61747-6-2	Liquid crystal display devices – Part 6-2: Measuring methods for liquid crystal display modules – Reflective type
ISO 9241-307	Ergonomics of human-system interaction – Part 307: Analysis and compliance test methods for electronic visual displays
ISO 11664-2	(CIE S 014-2/E:2006), Colorimetry – Part 2: CIE Standard illuminants
CIE 15-2004	Colorimetry

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:2022 ‘Rules for rounding off numerical values (*Second Revision*)’. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

SCOPE OF IEC 61747-30-1: 2012

“This part of IEC 61747 is restricted to transmissive liquid crystal display-modules using either segment, passive or active matrix and achromatic or colour type LCDs. Furthermore, the transmissive modes of transfective LCD modules with backlights ON are comprised in this document. An LCD module in combination with a touch-panel or a front-light-unit is excluded from the scope because measurements are frequently inaccurate. Touch-panels or front-lightunits are removed before measurement. Throughout the main body of this standard, an integrated backlight is assumed to provide the illumination for the measurements. Deviations from this (e.g. segmented displays without integrated backlights) may usually be handled in the same way as display modules with integrated backlight, if an external backlight is provided. However, in the case where one of the two situations should be handled differently, this will be specifically stated.”

Note: - The Technical content of this document has not been enclosed as these are identical with the corresponding IEC Standard. For details, please refer to IEC 61747-30-1: 2012 or kindly contact.

Head,

Electronics & IT Department
Bureau of Indian Standards
9, B.S. Zafar Marg,
New Delhi-110002
Email: litd@bis.gov.in, litd4@bis.gov.in
Tele: 011-23608401