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Display lighting unit -
Part 1-6: Quantum dot films and quantum dot diffuser plates used in backlight unit

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Display lighting unit - Part 1-6: Quantum dot films and quantum dot diffuser plates used in backlight unit

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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 Technical Report 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.

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- reconfirmed,
- withdrawn, or
- revised.

1 Scope

This part of IEC 62595, which is a technical report, provides general information for future standardization of quantum dot light converting unit (including quantum dot films and quantum dot diffuser plates) used in backlight units and provides examples of the effect of quantum dot light converting unit on the optical characteristics of backlight after environmental test.

NOTE Quantum dots (QDs) have broad application beyond display lighting units (DLUs). This document focuses on photoluminescent backlight units (BLUs).

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 62595-1-2, *Display lighting unit - Part 1-2: Terminology and letter symbols*

IEC 62607-3-1, *Nonmanufacturing - Key control characteristics - Part 3-1: Luminescent nanomaterials - Quantum efficiency*

ISO/TS 17466, *Use of UV-Vis absorption spectroscopy in the characterization of cadmium chalcogenide colloidal quantum dots*