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Optics and photonics — Preparation of drawings for optical elements and systems —

Part 11: Non-toleranced data

Optique et photonique — Indications sur les dessins pour éléments et systèmes optiques —

Partie 11: Données non tolérancées

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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This document was prepared by Technical Committee ISO/TC 172, *Optics and Photonics*, Subcommittee SC 1, *Fundamental standards*.

This third edition cancels and replaces the second edition (ISO 10110-11:2016), which has been technically revised.

The main changes are as follows:

a) the default category “Clear aperture to part edge (mm),” which was in the second row of Table 1, has been removed;

b) more information is given in 4.2 and Table 1 to clarify how to apply surface form defaults;

c) homogeneity and striae defaults have been updated based on the creation of, and technical changes in ISO 10110-18;

d) a footnote has been added to Table 1 that defines the default for edge chips;

e) 4.2 has been added and includes basic rules for using Table 1;

f) defaults for surface texture have been added to Table 1;

g) stress birefringence default tolerances for large optics have been changed to more commonly occurring values;

h) the default for coatings is now explicitly defined as “uncoated”;

i) the default for angular tolerances has been clarified;

j) 4.4 has been added to summarize drawing specifications for which default (implicit) values are not given in this document.

A list of all parts in the ISO 10110 series can be found on the ISO website.

This document addresses cases in which information required to fabricate optical elements is not included on drawings. They present the default values for the standard (ISO 10110 series), which, in many cases, are dependent on the size of the optic. These defaults are intentionally chosen to be values deemed as loose fabrication requirements for industry. These values do not represent absolute limits, however, and can be made looser for given drawings and applications.