



International

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**Non-destructive testing —
Evaluation of vision acuity of NDT
personnel**

*Essais non destructifs — Évaluation de l'acuité visuelle du
personnel END*

ISO 18490

**Second edition
2026-03**



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This second edition cancels and replaces the first edition (ISO 18490:2015), which has been technically revised.

The main changes are as follows:

- far and colour vision acuity of NDT personnel added to the Scope;
- updated references;
- new terms and definitions added;
- charts for Illumination level and Luminance added;
- chart for Eye to Chart distance for Near, Far and Colour vision added;
- additional provisions for vision correction added;
- test instructions for near, far, and colour vision added;
- guidance on verification of trained professional provided and sample attestation form for NDT Vision Test Report added as Annexes ([Annex I](#));
- information for grey scale perception and low contrast acuity added as Annexes ([Annex G](#) and [Annex H](#));
- for near vision, removed use of Tumbling E and added use of Reading Charts and Snellen chart;
- acceptance level for near, far, colour visions added;
- examples of Radner, Snellen and Landolt charts added as Annexes;

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Standards for NDT Personnel qualification and certification require that the visual acuity of inspection personnel is verified as being appropriate to their function. By meeting the vision acuity level defined in this document, such requirements of ISO 9712 will be met. The purpose of this document is to provide a detailed, standardised procedure for the evaluation of vision acuity for such personnel under defined lighting conditions.

The tests are not medical in nature and are intended to objectively ensure adequate vision perception. Because it is extremely difficult to demonstrate any equivalency in vision tests, this document has been prepared in order that an international system can be used without any need to demonstrate equivalence and is the recommended method of determining vision acuity for NDT Personnel.