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Responsible committee: WEE/46/7 Personnel

Interested committees:

Title: Draft BS EN ISO 18490 Non-destructive testing - Evaluation of vision acuity of NDT personnel.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

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Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT International Standard

ISO/DIS 18490

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

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

ICS: 03.100.30; 19.100

ISO/TC 135/SC 7

Secretariat: **SCC**

Voting begins on:
2025-05-01

Voting terminates on:
2025-07-24

This document is circulated as received from the committee secretariat.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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This document was prepared by Technical Committee ISO/TC 135, Non-destructive testing, SC 7, Personnel Qualification in collaboration with European Committee for Standardization (CEN), in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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
- Reference to *EN 4179 Aerospace series - Qualification and approval of personnel for non-destructive testing* removed
- Reference to *ISO 8596:2017 Ophthalmic optics Visual acuity testing Standard and clinical optotypes and their presentation* added as informative reference in the bibliography
- Reference to *ISO 7921:2024 Ophthalmic optics and instruments- Near reading charts* added as informative reference in the bibliography
- Reference to *ISO 10938:2016 Ophthalmic optics — Chart displays for visual acuity measurement — Printed, projected and electronic* added as informative reference in the bibliography
- Reference to *ASTM E3168, Standard practice for Determining Low-Contrast Visual Acuity of Radiographic Interpreters* added as informative reference in the bibliography
- 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

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- Informative information for grey scale perception and low contrast acuity added as Annexes ([Annex G](#) and [Annex H](#))
- For Near vision removed use of Jaeger Chart and 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
- Corresponding Reading Acuity Notations for Test Distances of 40 cm (16 inches) and 32 cm (12.5 inches) added as Annex