

Visual acuity test types —

Part 1: Specification for test charts for clinically determining distance visual acuity

Co-operating organizations

The Ophthalmic Standards Committee, under whose supervision this British Standard was prepared, consists of representatives from the following Government departments and professional and industrial organizations:

- Association of Dispensing Opticians*
- British Medical Association*
- Department of Education and Science
- Faculty of Ophthalmologists*
- Federation of Manufacturing Opticians*
- Guild of British Dispensing Opticians*
- Joint Committee of Ophthalmic Opticians*
- Ministry of Defence, Navy Department
- Ministry of Health*
- National Physical Laboratory (Ministry of Technology)

The Government department and professional and industrial organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

Scottish National Committee of Ophthalmic Opticians

This British Standard, having been approved by the Ophthalmic Standards Committee, was published under the authority of the General Council on 26 January 1968

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Foreword

Since their introduction by Snellen in 1862, distance test charts have become so diverse that they have ceased to provide a uniform test of visual acuity.

The object of this British Standard is to encourage the production and use of test charts designed to yield comparable results in the recording of visual acuity.

The design factors most affecting the legibility of test letters are the selection of letters and the style of type employed. The choice of non-serif letters of 5×4 construction, one of the three styles in current use, was considered to be justified on several grounds and to be in keeping with modern trends in typography. A more controversial question was the selection of letters, finally limited to the ten which have been shown by experiment to be of similar legibility.

Much thought was given to another vexed question, the progression of letter sizes. Although a true geometrical progression of sizes would be desirable on scientific grounds, the practical disadvantages of departing from the traditional range of sizes were considered to be too heavy a price to pay.

Because an acuity as good as 6/3 may sometimes be achieved, it was decided to include three lines smaller than the 6-metre line. Nevertheless, there was evidence that a number of practitioners would not favour the inclusion of the smallest sizes. This specification accordingly provides for alternatives, the full chart and an abridged chart omitting one or both of the sizes smaller than the 5-metre line.

The 6-metre line of the chart has 8 letters. There seemed no reason to increase this number for the smaller lines.

The luminance of the test chart and its immediate surround have been shown to exert a marked effect on vision. Recommendations on lighting both for externally and internally illuminated charts are detailed in *Appendix A*, and a number of simple lighting arrangements for externally illuminated charts are outlined in *Appendix B*. The suggested requirements are not difficult to meet and it is hoped that all practitioners will eventually conform to them.

When test charts are used for scientific purposes they should be viewed at 6 metres and the visual acuity should be expressed as 6/x. The letter C (indicating a Landolt ring chart) or E (indicating an illiterate E chart) should be added if one of these charts is used, since neither is exactly equivalent to a letter chart.

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Summary of pages

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This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.