BRITISH STANDARD FOR TEST-TYPES*†

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THE new British Standard on Test-types is a praiseworthy attempt to introduce uniformity into an established system of measuring distance visual acuity. Apart from its clinical use the determination of visual acuity may be of considerable medico-legal importance, and the variation between existing test-types has meant that there was undue scope for different assessments of visual acuity in the same person at the same time. Visual acuity is measured in two different states of visual function—uncorrected, and with the refractive error corrected. In the former case variations in the legibility of the letters is of importance. It is well recognized that astigmatism makes some letters more legible and others less so. The uncorrected visual acuity will therefore depend upon the axis of the astigmatism and upon the letters which are offered. So far as corrected visual acuity is concerned, this factor should not apply, and the only factor tending to affect the result is the legibility of the letters. The British Standard attempts to eliminate these difficulties in large measure by choosing for its test-types only those letters which are of approximately equal legibility, D, E, F, H, N, P, R, U, V, Z.

The other major principle to which the British Standard has paid attention is the intensity and uniformity of illumination of the test chart. Provided the illumination is sufficient, and the contrast between the illuminated test-type and the surroundings is not too great, variations in these factors do not have much effect upon visual acuity. These parameters have not, however, previously been defined with reference to test-types in terms of any standard measure of illumination; this has now been done. The recommended minimum illumination for internally illuminated charts is 120 candelas per square metre (35 foot-lamberts), and for externally illuminated charts 480 lux (lumens per square metre) on the assumption of a reflection factor of 0.8. Figures are given for the illumination contrast (as between the test letter and the test-type background), and also for the proportion between test-type surround and general illumination. In addition, the Test-Type Standard gives four simple methods of achieving adequate illumination of an acceptable uniformity. For details of these the British Standard should be consulted. The advantage to the practising ophthalmologist is obvious, in that it is now easy to ensure a reasonable coincidence of visual acuity testing by different observers.

Clearly every ophthalmologist will wish to have his findings repeatable, and this British Standard will enable him to do so in the simplest way.

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