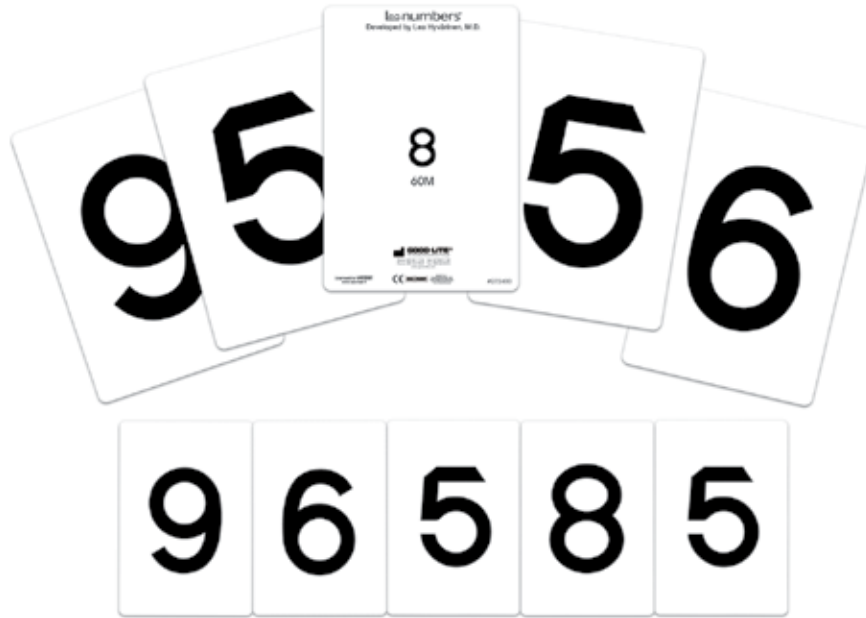




LEA Numbers Cards, 40M and 60M

Part Number: 272400



The large number cards with 40M and 60M optotypes can be presented as single cards or placed in a row for a line test at distance. If the visual acuity is so low that the cards must be held at near distance, watch whether the child/person fixates the picture to see it as a picture or traces the figure with eye movements, which is not a real recognition test situation.

If the cards are presented singly, the test situation is the same as when using the LEA Symbols Flash Cards choosing the presentation technique that meets the needs of the child/person. Always test within the cognitive visual sphere, the space within which the use of vision is possible.

The LEA Numbers are calibrated with Landolt C and thus give the same visual acuity values as the Landolt C test in normally sighted persons. Visual acuity values at this low value range are measured in an area of the visual field where all optotype sets behave individually. Landolt C is a resolving optotype and measures what is the smallest gap that the person/child can perceive whereas LEA Numbers also require recognition of the form. If a child/person uses eccentric fixation, it is usually impossible to know whether the child/person used the same preferred area of the visual field for each measurement. A shift in the fixation area is likely to result in another visual acuity value.

In clinical measurements we most often want to learn what are the smallest forms that the person can recognise. Resolving tasks are rare in every day tasks.

With this addition to the LEA Numbers tests it is possible to measure recognition visual acuity at 3 m distance with LEA Numbers between 2.5 (20/8.0, 6/2.4) and 0.05 (20/400, 6/126).

If the test with the 60M cards is performed at 1 m distance, then the visual acuity value is 0.016 (20/1250, 6/380). In the rare cases where the child/person can read all optotypes correctly on the 2.0

(20/10, 6/3) row and none on the 2.5 (20/8.0, 6/2.4) line, the test can be moved to a slightly shorter distance to record the threshold level. At a distance of 2.76 m the visual acuity value of the 2.5 line is 2.3 (20/8.7, 6/2.6).

The range of measurements with calibrated tests covers thus from 0.016 to 2.5, which is the range of visual acuity values used in clinical examinations for diagnostic work and vision rehabilitation. The uncalibrated "finger counting" can be deleted from the descriptions of visual acuity though "hand movements at ___ m distance" and "light perception with or without projection" provide useful information.

Note:

The recognition visual acuity values should always be accompanied with a grating acuity value measurable with the LEA Grating Acuity test to detect changes in visibility of straight lines, which the recognition acuity does not reveal.