

LEA Numbers® Distance Folding Chart (271100)

When examining/screening older children and adults the foldable chart (#271100) is kept hanging on the wall. Also the translucent charts (#270200, #271200 and #271300) can be used like the foldable charts without lightbox. During assessment of vision of visually impaired individuals it can be used at shorter distances, even as a near vision test. Testing uses the same principles as testing at near distances.

Instruction

- First test binocularly. Briefly point to the first optotype in each or every other line in descending order and ask the person to identify it. Make sure that the covering card is not too close to the line to be read and does not create a shadow.
- Move down until the child/person hesitates or misidentifies a number.
- Move back up one line and ask the person to identify all numbers on that line. If this is successful move down and ask the person to read the line where the error was made.
- Visual acuity is recorded as the last line on which at least 3 out of 5 numbers were identified correctly. If only 2 numbers were correctly recognized the value is that of the previous line +2, i.e. if the person read 2 correct on the 20/25 (6/8, 0.8) line, visual acuity is 20/30 (+2) (6/9 (+2), 0.63 (+2).
- After binocular testing test each eye separately.

If a chart is used at a distance other than the usual 3 or 4 meters (10 or 13 feet), measure and record the viewing distance and the symbol size (the M value) or the visual acuity value printed at the threshold line.

To determine the visual acuity use one of the following formulas:

$$VA = \frac{Viewing\ Distance\ Used\ (meters)}{M\text{-value}}$$

$$\frac{OR}{VA} = \frac{Viewing\ Distance\ Used\ (cm\ or\ inches)}{40\ cm\ (16\ inches)}\ x\ VA\ value\ for\ 40\ cm\ (16\ inches)}{(16\ inches)\ Iine\ read}$$

M-unit, metric unit is the distance in meters at which the reference optotype C is seen at a visual angle of 5°.