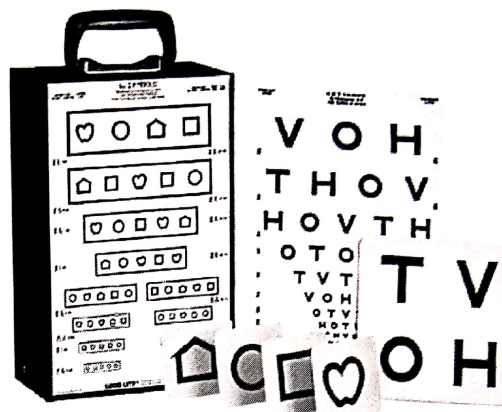


## 12 and 13 Line Translucent Distance Chart



Standard illumination is a prerequisite for standardized measurements of visual acuity. Illuminator cabinets have been used more than 25 years to guarantee even illumination of visual acuity tests. They are most often used at the maximum illumination but can also be used even at low mesopic luminance levels by reducing the luminance level with filters in front of the test. It is easy to hold the covering card above the line to be read by sliding it between the test and the frame of the lightbox.

*Lea Symbols* distance visual acuity tests are manufactured for both the small lightbox and the large EDTRS style illuminator cabinet. For the small lightbox there are tests for 3 meter (10 feet) test distance, test #250400 and test #252400 and for 4 meter (13 feet) test distance, test #255100.

The *Lea Symbols* distance visual acuity test for the small lightbox is manufactured for both 3 meters (10 feet) (#252400) and 4 meters (13 feet) (#255100) with either two groups of the smaller symbol lines or with only one group of symbols (#250400).

### Instruction

- Establish a method of communication such as naming (signing) or pointing (matching). Decide with the child which names will be used to identify the symbols. When needed, train with the *LEA Puzzle* (#251600), *Response Key Card* (#251700), or *Flash Cards* (#251800).
- Briefly point to the first symbol in each line in descending order when testing binocularly. Do not leave the pointer close to the symbol because it makes fixation easier, especially in case of amblyopia, lazy eye. If the child seems to have difficulties in knowing which line to look at, cover the line above the line to be read with a white card leaving a little of the upper line visible.
- Move down until the child hesitates or misidentifies a symbol.
- Move back up one line and ask the child to identify all the symbols on that line.
- If the child identifies all symbols correctly go to the next line with smaller symbols and ask the child to identify all symbols on the line.
- If the child skips a symbol ask the child to try again while briefly pointing to that symbol.
- A child with an amblyopic eye may typically skip symbols within a line of symbols.
- Visual acuity is recorded as the last line on which at least 3 of the 5 symbols are identified correctly.
- When tested at 3 meters (10 feet) the visual acuity value is found in the margin adjacent to that line.
- After obtaining good responses with binocular testing, proceed by testing each eye separately.
- When testing monocularly, use the first symbol of each line or every second line for one eye and the last symbol of each line for the other eye to determine on which line to start testing.

#### Testing at Different Distances

If the chart is used at a distance other than the usual 3 meters (10 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:

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

OR

$$VA = \frac{\text{Viewing Distance Used (meters or feet)}}{3 \text{ meters (10 feet)}} \times \text{VA value for 3 meters (10 feet)}$$

Note that it is incorrect to report 'V.A. 20/25 at 5feet' if the child could read the 20/25-line (3.8M line) at 5 feet. Visual acuity is in that case:  $5'/10' \times 20/25 = 1/2 \times 20/25 = 20/50$ . (When using the British notation: 6/9 line at 150cm equals:  $1.5\text{m}/3\text{m} \times 6/9 = 1/2 \times 6/9 = 6/18$ . (When using the British notation: 6/9 line at 150cm equals:  $1.5\text{m}/3\text{m} \times 6/9 = 1/2 \times 6/9 = 6/18$ . When using the decimal notation 0.8 at 1.5m equals:  $1.5\text{m}/3\text{m} \times 0.8 = 1/2 \times 0.8 = 0.4$ )