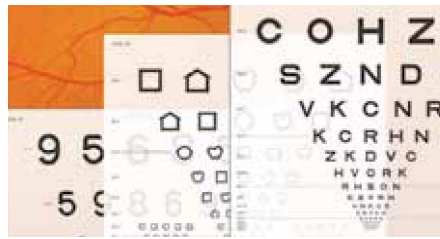
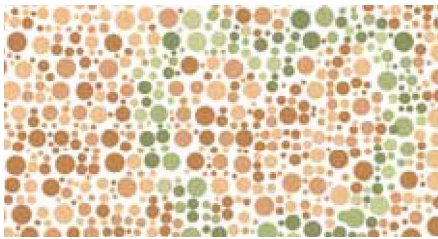


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• LEA Numbers • Sloan Letters • Adult Vision • Spot Handheld Vision Scre

Symbols • LEA Numbers • Phoropter Roto Chart • Sloan Letters • Reading C

Spanish Reading Cards • Rehabilitation Charts • Low Vision Devices • Low Vi

mps • Low Contrast Charts • Low Contrast Flip Charts • ELCT Contrast Cha

000 & ESC2000 ETRS • ESV1200 & 1500 • Insta-Line Quantum • ESV1018

0 • Super Pinhole • Stereoacuity Screening • Random Dot E • Disparity Targ

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These products and  
much, much more can be  
found on our website at:

[www.gl-europe.com](http://www.gl-europe.com)

## LEA Core Vision Tests — Page 2

The Core Tests based on LEA Symbols and LEA Numbers designed for screening and assessment of visual functioning.

## Distance Visual Acuity Testing — Page 9

|                        |                  |             |
|------------------------|------------------|-------------|
| Wall & Handheld Charts | Pediatric Vision | LEA Symbols |
| LEA Numbers            | Sloan Letters    | AAPOS Kit   |

## Near Vision and Reading Visual Acuity — Page 11

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|---------------|--------------------------|-----------------------|
| LEA Symbols   | LEA Numbers              | Intermediate Distance |
| Sloan Letters | Landolt C and Tumbling E |                       |

## Low Vision and Low Contrast — Page 14

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| Rehabilitation Charts | 40M and 60M Cards        | Low Vision Lamps    |
| Low Contrast Charts   | Low Contrast Flip Charts | ELCT Contrast Chart |

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| ESV3000 & ESC2000 ETDRS<br>Near and Intermediate Charts | ESV1200 & 1500<br>CSV-1000 | ETDRS Charts<br>Super Pinhole |
|---|----------------------------|-------------------------------|

## Stereoacuity Screening — Page 27

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| Stereoacuity Screening | Random Dot E              | Stereo Vision Viewers |
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## Color Vision/Refraction Tools — Page 28

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| Panel 16              | ColorCheck Color Vision Screener |
| Confirmation Flippers | Retinoscopy Paddles              |

## Examination Tools — Page 29

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|--------------|-------------------|-----------------|
| Campimeter   | Frosted Occluders | Fixation        |
| Flicker Wand | Occluders         | Measuring Cords |

## 3 Easy Ways to Contact ProVista or Trusetal:

PROVISTA  
international



By Email  
[mail@pvi.no](mailto:mail@pvi.no)



By Phone  
**+47 37 03 31 00**



By FAX  
**+47 37 03 31 01**

TRUSETAL  
VERBANDSTOFFWERK GMBH



By Email  
[info@tshs.eu](mailto:info@tshs.eu)



By Phone  
**+49 5207 991688-0**



By FAX  
**+49 5207 991688-28**

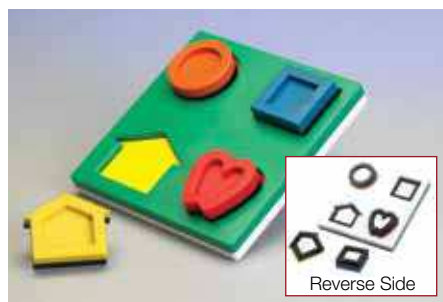
## Visual Acuity Tests: lea SYMBOLS®

Visual acuity tests are used more than any other tests in ophthalmology, optometry, and in vision screening in preschool, school, and occupational health care. Visual acuity can be measured with several different tests that depict different qualities of vision. The basic test is the line test, which has at least five optotypes (test symbols) on the test lines with spaces between the optotypes that are equal to

the width of the optotypes of that line. The distance between the test lines is equal to the height of the lower line (Visual Acuity Measurement Standard (1984) Consilium Ophthalmologicum Universale, Visual Function Committee).

In the LEA Test System series there are line tests, tests with more crowded symbols, and single symbol tests to

allow assessment of function of the visual system in these three functionally different situations. The number of tests has grown over the years because the needs in screening and assessment of children and adults vary at different ages and different functional levels. For more information, go to the Instruction Section of <http://www.lea-test.fi>.



### LEA 3-D Puzzle

The LEA 3-D Puzzle is designed for supporting the development of the concept of "same", first with colors, then with black and white concrete forms that are prerequisites for the measurement of recognition acuity with the LEA Symbols tests at an early age. During the play you can also observe eye-hand coordination and awareness of directions, which are often problems for children with brain damage, even mild brain damage. Package includes the booklet: *Assessing Vision Development Through Picture and Shapes* and instructions. Tray is 17.2 cm x 17.2 cm. The 4 symbol puzzle pieces are approximately 5.1 cm x 5.1 cm each.

..... 251600



### LEA Symbols Playing Cards

These specially designed playing cards make it easy to measure near visual acuity in young children, while teaching concepts of similar/different, big/small, bigger/smaller. The 4 packs contain 16 cards each with symbols of varying sizes: 16M and 10M, 6.3M and 4M, 2.5M and 1.6M, and 1M and 0.63M. Includes training cards and instructions. The paper cards measure 4 cm x 7 cm.

..... 252500



### LEA Symbols Domino Cards

Assess the near visual acuity of 2- and 3-year-old children, or use the cards at any age (older than 2+ years) to train an amblyopic eye. Set contains 3 packs of 16 domino-like cards with a large symbol at one end and a small symbol at the opposite end. Symbol sizes are 3.2M and 0.8M, 2.0M and 0.5M, and 1.25M and 0.3M. Each symbol on the card is printed with its M unit, decimal value, 6 meters equivalency for visual acuity value at 40 cm testing distance. Includes training cards and instructions. Paper cards measure 4 cm x 7 cm.

..... 251500



### LEA Symbols Near Vision Screener (40 centimeters)

This test is designed for amblyopia screening and testing children who have difficulties when tested with the standard near vision card (#250800). The background is gray with the exception of a white rectangle spaced at 100% surrounding each line of symbols. Line sizes from 20/400 to 20/16 (6/120 to 6/4.8) equivalent, 0.05 to 1.25. Printed on two sides. Response key is printed on the test card. Includes training cards and instructions. Screener measures 20.3 cm x 25.4 cm.

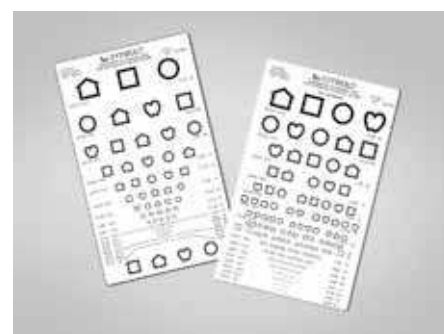
..... 252000



### LEA Symbols Near Vision Card (40 centimeters)

This test measures near visual acuity with proportionally spaced (logMAR) lines on the front and lines with 25% and 50% spacing on the back. The tighter spacing often reveals difficulties in seeing tightly spaced details, which should be known when a child is learning to read. Line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Response key printed on test card. Includes training cards and instructions. Card measures 20.3 cm x 25.4 cm.

..... 250800



### LEA Symbols Pocket-Sized Near Vision Card (40 centimeters)

This test is designed for testing patients' visual acuity during rounds and in similar situations with a need for quick testing. The test has proportionally spaced (logMAR) lines on one side and tightly crowded lines (50% spacing) on the reverse side. Line sizes from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. 9.5 cm x 15.9 cm.

..... 250950



**LEA Symbols Distance Vision Screener (3 meters)**

This test is designed for amblyopia screening and testing children who have difficulties when tested with the standard distance charts (#250250 or 250150). The background is gray with the exception of a white rectangle spaced at 50% surrounding each line of symbols. Line sizes from 20/80 to 20/16 (6/24 to 6/4.8) equivalent, 0.25 to 1.25. Includes response key and training cards. Pages are offset for easy flipping. Instructions are printed on the inside cover. 10 pages, 8.25 cm x 22.9 cm.

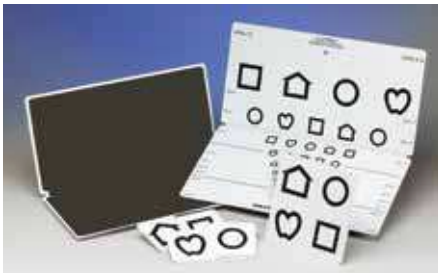
.....259900



**LEA Symbols Crowded Symbol Book (3 meters)**

The Crowded Symbol Book is designed for testing children and adults who have difficulty in reading lines of optotypes. In this test, the child or adult identifies only the middle optotype. The four symbols surrounding the central symbol similarly to the way optotypes are crowded on line acuity charts. As a result of this crowding effect, this test often permits measurement of line acuity in young children much earlier than the line visual acuity charts and, thus, helps in early detection of amblyopia and impaired vision. Line sizes from 20/63 to 20/16 (6/19 to 6/4.8) equivalent, 0.63 to 1.25. Includes response key, training cards, and instructions. 16 offset pages, 12.7 cm x 12.7 cm.

.....250700



**LEA Symbols 10-Line Distance Chart (3 meters)**

This test is the most commonly used test in the health care of children at the age of 3 to 4 years and in amblyopia screening in many countries.

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/16 (6/60 to 6/4.8) equivalent, 0.25 to 1.25. The 20/160 (6/48) and 20/100 (6/30) lines have been omitted. The reverse side is black and can be used as the test surface for the color vision test (#260260). Has a hole for hanging the chart on the wall. Includes response key, training cards, and instructions. 40.6 cm x 40.6 cm. Folds to 40.6 cm x 20.3 cm.

.....250250



**LEA Symbols Single Symbol Book (3 meters)**

The Single Symbol Book is designed for testing children and adults who have difficulties in perception of symbols in lines. The visual acuity values measured with single symbols are often several lines better than the line acuity values in persons with impaired vision and, thus, overestimate the quality of visual functioning. Single optotype line sizes from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. Includes isolating mask, response key, training cards, and instructions. 13 offset pages for easy flipping. 12.7 cm x 12.7 cm.

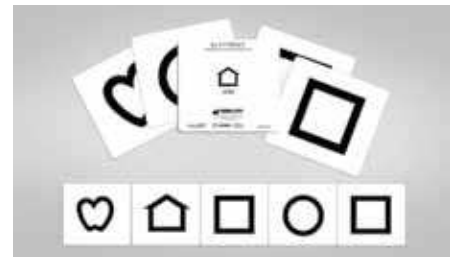
.....250600



**LEA Symbols Flash Cards (3 meters)**

This set of flash cards was designed for testing distance visual acuity in children and adults who have difficulty with visual acuity charts, the Crowded Symbol Book Test, or the Single Symbol Book Test. Line sizes from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. Includes response key, training cards, and instructions. 30 cards per set, 10 cm x 12.7 cm to 12.7 cm x 12.7 cm.

.....252700



**LEA Symbols Cards, 40M and 60M**

The 5 LEA Symbols Cards, 40M and 60M, can be presented as single optotypes or arranged in a row as a line test. When the cards are next to each other, the space between the symbols is equal to the width of the symbols. To determine the visual acuity use the following formula:

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

60M cards are approx. 21.9 cm x 21.9 cm. 40M cards are approx. 15.25 cm x 15.25 cm.

.....256100



**Leo Learns By Doing (DVD, 17 minutes)**

When a blind child is born into a family, the situation is new and confusing. Parents have thousands of

questions, but very few answers, such as:

- How am I able to do everything possible for my child?
- How can our everyday life become ordinary, good, and safe, yet active?
- How can I best support my child?
- Am I overprotective or encouraging as a parent?
- How will my blind child receive as many experiences as the seeing child?

These questions and more are answered in this DVD.

.....790000

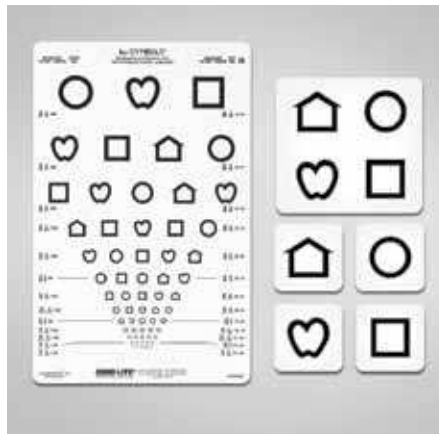
**See page 8 for more information on What and How Does This Child See?**



## LEA Symbols 15-Line Distance Chart (3 meters)

This test is designed for vision screening at schools and assessment of vision of children with special needs beginning with age of 3 years. Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. The reverse side is black and can be used as the test surface for the color vision test (260260). Has a hole for hanging the chart on the wall. Includes response key, training cards, and instructions. 43 cm x 53.4 cm. Folds to 43 cm x 26.7 cm.

..... **250150**

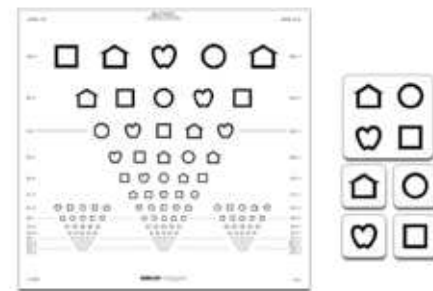


## LEA Symbols 13-Line Translucent Distance Chart (3 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/125 to 20/8 (6/38 to 6/2.4) equivalent, 0.16 to 2.50. This chart can either be wall mounted or used in an illuminated cabinet found on page 26. Includes response key, training cards, and instructions.

Set ..... **250400**

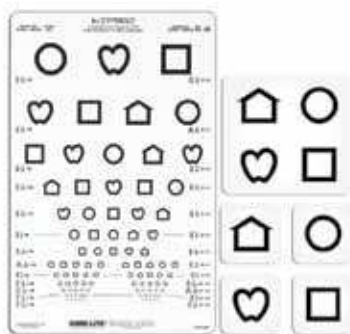
Chart Only ..... **250401**



## LEA Symbols 15-Line Translucent ETDRS-Style Distance Chart for ESV3000 Cabinet (3 meters)

LEA Symbols distance visual acuity test for the ETDRS Illuminated Cabinet. Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. Includes response key, training cards, and instructions. 62 cm x 65 cm.

..... **250300**

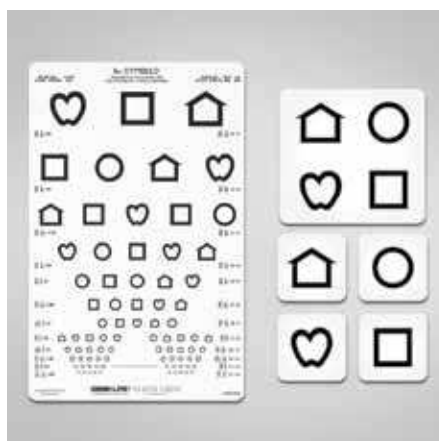


## LEA Symbols 13-Line Translucent Distance Chart (3 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/125 to 20/8 (6/38 to 6/2.4) equivalent, 0.16 to 2.50 with repetitive left eye/right eye groups. This chart can either be wall mounted or used in an illuminated cabinet found on page 26. Includes response key, training cards, and instructions.

Set ..... **252400**

Chart Only ..... **252401**



## LEA Symbols 12-Line Translucent Distance Chart (4 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/100 to 20/8 (6/30 to 6/2.4) equivalent, 0.20 to 2.50. This chart can either be wall mounted or used in an illuminated cabinet found on page 26. Includes response key, training cards, and instructions.

Set ..... **255100**

Chart Only ..... **255101**



## LEA Symbols Chart for Vision Rehabilitation (40 inches/1 meter)

This test is designed for testing children and adults with visual impairment at a distance of 1 meter. The largest symbols are 50M in size, corresponding to 1m/50M = to 1/50 or decimal visual acuity 0.02, equivalent values 20/1000, 6/300. The smallest symbols are 1M in size corresponding to 1m/1M = to 1/1 or decimal visual acuity 1.00, equivalent values 20/20, 6/6. Designed courtesy of August Colenbrander, MD. Chart measures 40.7 cm x 54.6 cm. Folds to 40.7 cm x 27.3 cm.

..... **258000**

## Visual Acuity Tests:

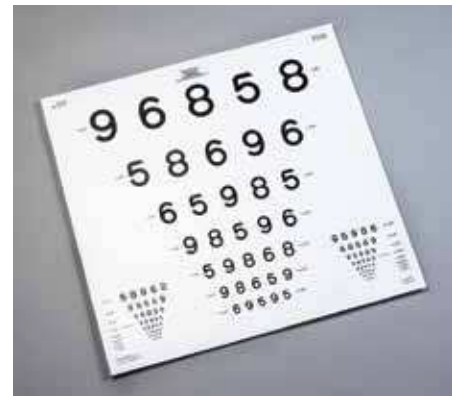


LEA Numbers were developed for international studies in occupational health and school health services. Letters like the Sloan letters are used in the Western world and in the old colonies of western empires but not in a large part of the rest of the world. The Arabic numbers

## Lea-numbers®

are known world over, even in countries that use other types of numbers. The four numbers 5, 6, 8, and 9 were chosen because they could be designed to blur equally.

The numbers 5, 6, 8, and 9 were designed by Dr. Hyvärinen in 1993 and calibrated with the Landolt C (Juvi Mustonen, OD; Risto Näsänen, PhD; and Lea Hyvärinen, MD, Vision Laboratory, Department of Physiology, University of Helsinki, Finland 1994).



### LEA Numbers 15-Line Translucent ETDRS-Style Distance Chart for ESV3000 Cabinet (4 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50.

..... 270200



### LEA Numbers Near Vision Card (40 centimeters)

Designed to measure visual acuity with a standard line test and with three tighter spaced tests; 50%, 25%, and 12.5%, which often reveal difficulties in seeing tightly crowded details. Line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Card measures 20.3 cm x 25.4 cm.

..... 270900



### LEA Numbers 15-Line Distance Chart (3 meters)

This test is designed for vision screening at schools and assessment of vision of children with special needs beginning with age of 3 years. Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. Has hole for hanging on the wall. 45.7 cm x 50.8 cm. Folds to 45.7 cm x 25.4 cm.

..... 271100



### LEA Numbers Chart for Vision Rehabilitation (1 meter)

This test is designed for testing children and adults with visual impairment at a distance of 1 meter. The largest symbols are 50M in size, corresponding to 1m/50M = to 1/50 or decimal visual acuity 0.02, equivalent values 20/1000, 6/300. The smallest symbols are 1M in size corresponding to 1m/1M = to 1/1 or decimal visual acuity 1.00, equivalent values 20/20, 6/6. Designed courtesy of August Colenbrander, MD. Chart measures 40.7 cm x 54.6 cm. Folds to 40.7 cm x 27.3 cm.

..... 272100

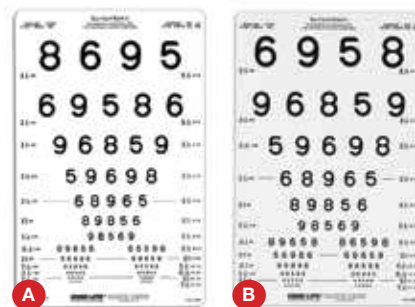


### LEA Numbers Near Vision Card (24 inches/60 centimeters)

Designed to measure visual

acuity with a standard line test and with three tighter spaced tests; 50%, 25%, and 12.5%, which often reveal difficulties in seeing tightly crowded details. Line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Card measures 20.3 cm x 25.4 cm.

..... 274100



### A LEA Numbers 13-Line Translucent Distance Chart (3 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/125 to 20/8 (6/38 to 6/2.4) equivalent, 0.16 to 2.50.

..... 271200

### B LEA Numbers 12-Line Translucent Distance Chart (4 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/100 to 20/8 (6/30 to 6/2.4) equivalent, 0.20 to 2.50.

..... 271300



### LEA Numbers Pocket-Sized Near Card (40 centimeters)

This test is designed for testing patients'

visual acuity during rounds and in similar situations with a need for quick testing. The test has proportionally spaced (logMAR) lines on one side and tightly crowded lines (50% spacing) on the reverse side. Line sizes from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. 9.5 cm x 15.9 cm.

..... 271000



## LEA Numbers Single Number Book (3 meters)

The Single Number Book is ideal for situations in which the child/adult cannot perform when tested with a line test. This book can help determine the best resolution of the visual pathway in a child/adult with amblyopia or impaired vision. Single optotype line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. Includes isolating mask and instructions. 13 offset pages for easy flipping. 12.7 cm x 12.7 cm.

..... **274000**



## LEA Numbers Cards, 40M and 60M

These five LEA Numbers Cards can be used for presentation as single optotypes or arranged in a row as a line test. When the cards are next to each other, the space between the numbers is equal to the width of the symbols. To determine the visual acuity use the following formula:

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

60M cards are approx. 15.25 cm x 22.9 cm.

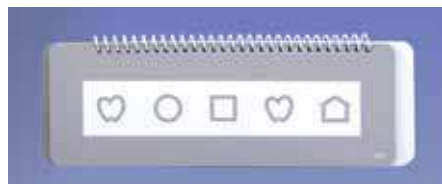
40M cards are approx. 10.2 cm x 15.25 cm.

..... **272400**

## Contrast Sensitivity

The contrast sensitivity tests that Dr. Hyvärinen has developed for clinical examinations and research projects have been used in the evaluation of vision of thousands of patients in numerous countries revealing changes in visual functioning that were not detected with

the high contrast visual acuity tests. Measurement of contrast sensitivity should be a part of routine examinations because vision at low and intermediate contrast levels is important in communication and orientation in space.

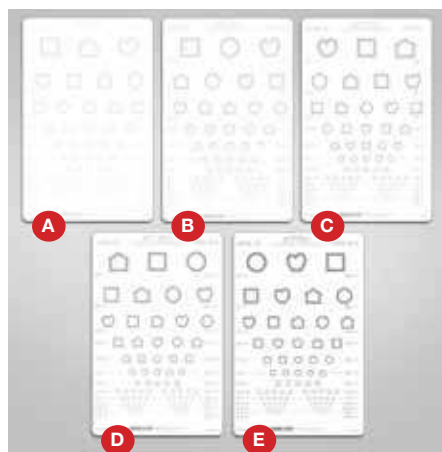


## LEA Symbols Low Contrast Test, 10M

Test for quick measurement of low contrast visual acuity at 25%, 10%, 5%, 2.5%, and 1.25% contrast by measuring the distance where the symbols are seen. 10M symbols correspond to visual acuity 0.10 at 1M, 0.5M, and 0.3 at 3M. VA values are, thus, easy to calculate. Test includes a table for conversion to Snellen equivalent VA values, a response key, training cards, recording forms, and instructions. 6 pages, 8.25 cm x 22.9 cm.

..... **251100**

Mixed Order ..... **251200**



## LEA Symbols Translucent Low Contrast Charts for Illuminated Cabinet

A low contrast test is a special way to measure visual acuity to determine how well eyes function in low light situations and/or to determine how well eyes distinguish objects from similarly colored or shaded backgrounds. Testing is identical to the measurement of visual acuity at high contrast level. The 2.5% test is the most practical test in clinical use. Available in 5 contrast levels: 1.25%, 2.5%, 5%, 10%, and 25%. Includes response key, training cards, recording forms, and instructions.

**A** 1.25% ..... **253700**

**B** 2.5% ..... **253800**

**C** 5% ..... **253900**

**D** 10% ..... **254000**

**E** 25% ..... **254100**



## LEA Numbers Low Contrast Test, 10M

Test to easily measure, record, and detect changes in the transfer of visual information when the change only affects visual acuity at low contrast levels. Chart presents numbers at the following contrast levels: black, 25%, 10%, 5%, 2.5%, and 1.25%. Pages are offset for easy flipping. Each chart includes recording forms and instructions. 6 pages, 8.25 cm x 22.9 cm.

..... **270400**

Mixed Order ..... **270500**



## Hiding Heidi Low Contrast Face Test

See page 8 for more details.

Four cards printed

on both sides in the following contrast levels: black, 25%, 10%, 5%, 2.5%, and 1.25%. Cards are 23 cm x 23 cm. Includes instructions.

..... **253500**

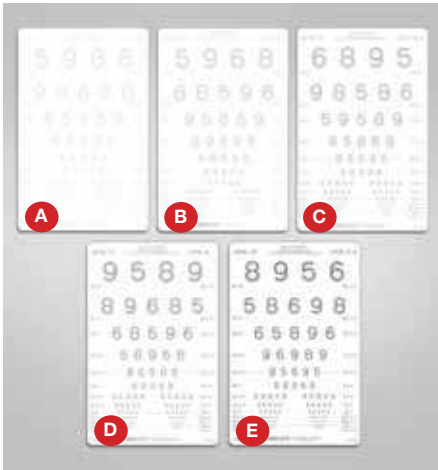


## LEA Low Contrast Grating Acuity Test

Measurement of contrast sensitivity curve is based on 4 gratings at 2 contrast levels, 10%, and 2.5% contrast using 2 grating frequencies: 0.5 cpcm and 8 cpcm (10% level) or 0.5 cpcm and 4 cpcm (2.5% level). Testing is based on finding the distance where the person is at threshold in seeing the direction of the grating lines. Includes nomograms, instructions, and recording forms. Measures 20 cm in diameter.

..... **253400**





**LEA Numbers Low Contrast Charts for Illuminated Cabinet**

A low contrast test is a special way to measure acuity to determine how well eyes function in low light situations and/or to determine how well eyes distinguish objects from similarly colored or shaded backgrounds. Testing is identical to the measurement of visual acuity at high contrast level. The 2.5% test is the most practical test in clinical use. Available in 5 contrast levels: 1.25%, 2.5%, 5%, 10%, and 25%. Includes response key, training cards, recording forms, and instructions.

- A** 1.25% ..... **271500**
- B** 2.5% ..... **271600**
- C** 5% ..... **271700**
- D** 10% ..... **271800**
- E** 25% ..... **271900**

**Visual Field**



**LEA Flicker Wand**

The LEA Flicker Wand is 67.3 cm long with a 50.8 cm flexible wand with a diode at the end that can be used as either a flickering or non-flickering stimulus at 4, 40, and 400 cd/m<sup>2</sup>. The curved wand is moved from behind the person forward in all four quadrants of the visual field to detect losses in the periphery of the visual field.

..... **280000**

**Cognitive Vision**

Visual information undergoes several neural processes before it is perceived as images. When vision changes, the changes may occur either in the image quality, due to disorders of the eyes and/or visual pathways, or picture perception, due to loss of function in some of the specific analytic functions in the visual cortices. The number of visually impaired children with brain damage-related visual impairment is increasing in all countries.

Tests for cognitive vision were designed for early diagnosis of some usual cognitive problems.

It is important that all cognitive visual functions are assessed, from seeing the orientation of lines and size of objects to different recognition functions and more complicated perceptual tasks. For example, a child who has lost recognition of facial features only may be misunderstood when he/she does not greet people whom the child knows well. Likewise, children who do not perceive facial expressions may be taken as autistic when they cannot function in a group of toddlers whose communication is through body language. For more information, go to the Instructions Link: [www.lea-test.fi](http://www.lea-test.fi)



**LEA 3-D Puzzle**

The LEA 3-D Puzzle is designed for training and assessing typically developing toddlers and other young children. The puzzle also serves as an assessment tool for individuals with brain damage, or for older children and adults with low cognitive abilities. Includes instructions and the booklet: *Assessing Vision Development Through Pictures and Shapes*. Tray is 17.2 cm x 17.2 cm. The 4 symbol puzzle pieces are approximately 5.1 cm x 5.1 cm each.

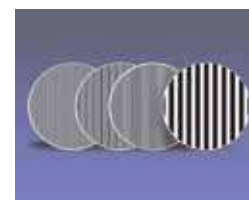
..... **251600**



**Small and Medium Heidi Fixation Targets**

The small 5 cm diameter "smiling face" fixation paddle was developed based on studies by Robert Fanz. Features include grating on reverse side, small pictures of a bunny and a giraffe for demanding fixation, and pupil size and corneal diameter measurement on the handle. The medium 13 cm diameter fixation paddle is for assessing children with severe disabilities to determine the distance at which the children respond to a high-contrast face figure.

- A** Medium Target ..... **253100**
- B** Small Target ..... **253000**



**LEA Grating Acuity Test, a Resolving/Discrimination Test**

This test at full contrast requires

discrimination of the direction of long lines, which is a more demanding task than the detection acuity measured with LEA GRATINGS. The test gratings are presented to children and adults at different distances to determine which distance the direction of lines can be perceived. Knowing the distance and which grating was used, the grating acuity values can be read from the nomograms. Includes, nomograms, instructions, and storage case. 4 disks 20 cm in diameter.

..... **251300**



**LEA GRATINGS, a Preferential Looking Test**

LEA GRATINGS are for preferential looking test situations with infants or children and adults with disabilities to determine detection acuity. Grating levels printed on each handle are: 0.25, 0.5, 1.0, 2.0, 4.0, and 8.0 cpcm (cycles per centimeter of surface). Includes instructions and storage case. 4 paddles 20 cm in diameter.

..... **253300**



## Hiding Heidi Low Contrast Face Test

Visual communication is the most important communication method during the first year of life. The ability to detect objects of low contrast is an important component of the visual system. For example, facial expressions are mediated by faint shadows and changes in the contours of the mouth and eyes. Determining the levels of contrast that an infant can detect helps provide baseline data for evaluating future changes. For example, deviations from usual behavior may indicate disorders that leave vision at high-contrast levels unaffected.

Four cards printed on both sides in the following contrast levels: black, 25%, 10%, 5%, 2.5%, and 1.25%. Cards are 23 cm x 23 cm. Includes instructions.

..... 253500



## Heidi Expressions Test Game

Some children with visual impairments may achieve near normal results in routine vision tests (large visual field and normal or near normal visual acuity), but cannot interpret facial expressions or recognize people's faces. The Heidi Expressions Test Game improves early evaluation of vision for communication. 18 cards per set. Cards are 10.16 cm x 10.16 cm.

..... 254505



## LEA Rectangles Game

This educational toy is a modified version of Efron's rectangles and is used to assess size perception. The Rectangles Game contains two groups of rectangles. The total surface area of each rectangle is the same. A child with normal eyesight can distinguish between the longer and the shorter rectangles—often before the age of 3 years. If the child has difficulty making this distinction or does not understand the instructions, the LEA Rectangles Game can help determine whether or not the child has a specific visual acuity problem. Includes instructions and 10 colored rectangles (5 black, 5 gray) in 5 sizes with a total area of 10.16 cm each.

..... 254600



## LEA Mailbox Game

Used to assess visual perception of line orientation. Tests two components:

1) information for the hand movements in the parietal lobe and 2) picture perception in the inferior temporal lobe. To observe the first function, the child is asked to drop a card through the slot of the LEA Mailbox Game. The child should demonstrate perception of the orientation of the slot by turning the card to the correct position before moving it half the distance to the slot (dorsal stream function). A ventral stream function can be observed through interactive play using the LEA Mailbox Game. If a child cannot visually perceive the orientations of lines, drawing them may be difficult, and drawing angles will make no sense. Includes instructions.

..... 254700

## Adaptation Test



## Cone Adaptation Test

The test consists of 15, 5 cm x 5 cm red, blue, and white plastic chips designed to help parents, teachers, and doctors assess children's visual difficulties in twilight. The test situation is not a formal test of night vision, but gives useful information on visual adaptation to lighting changes.

..... 252900

## Color Vision Test



## Panel 16 Quantitative Color Vision Test

The Panel 16 Color Vision Test includes 16 test caps and 17 restriction rings with one of the caps being a "pilot". The diameter of the stimulus area is 3.3 cm, and can be reduced by using dark gray restriction rings with an opening of 1.2 cm in diameter. Acrylic case includes a cloth storage pouch. Travel tube comes with black cloth. Both come with recording forms and instructions.

Single Set

**A** With Acrylic Case. .... 260200

**B** With Travel Tube. .... 260260

Double Set (Shown on page 10)

With Acrylic Case .... 260100

With Travel Tube .... 260160



## "WHAT and HOW Does this Child See?"

Is a question that is asked each day by many professionals in early intervention and education about children with disabilities. This book attempts to help you structure your questions so that you can look for answers together with other members of your team. This book is a collection of questions and answers from lectures presented by **Lea Hyvärinen, MD, PhD, FAAP,** and **Namita Jacob, PhD,** in a number of countries.

..... 791000

## Distance Acuity Wall Charts



### LEA Symbols 10-Line Distance Chart (3 meters)

This test is the most commonly used test in the health care of children at the age of 3 to 4 years and in amblyopia screening in many countries.

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/16 (6/60 to 6/4.8) equivalent, 0.25 to 1.25. The 20/160 (6/48) and 20/100 (6/30) lines have been omitted. The reverse side is black and can be used as the test surface for the color vision test (#260260). Has a hole for hanging the chart on the wall. Includes response key, training cards, and instructions. 40.6 cm x 40.6 cm. Folds to 40.6 cm x 20.3 cm.

..... **250250**



### LEA Symbols 15-Line Distance Chart (3 meters)

This test is designed for vision screening at schools and assessment of vision of children with special needs beginning with age of 3 years. Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. The reverse side is black and can be used as the test surface for the color vision test (260260). Has a hole for hanging the chart on the wall. Includes response key, training cards, and instructions. 43 cm x 53.4 cm. Folds to 43 cm x 26.7 cm.

..... **250150**

**Insist On Genuine LEA Products by GOOD-LITE®**

**lea SYMBOLS®**

**lea.numbers®**



### LEA Numbers 15-Line Distance Chart (3 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. Has hole for hanging on the wall. 45.7 cm x 50.8 cm. Folds to 45.7 cm x 25.4 cm.

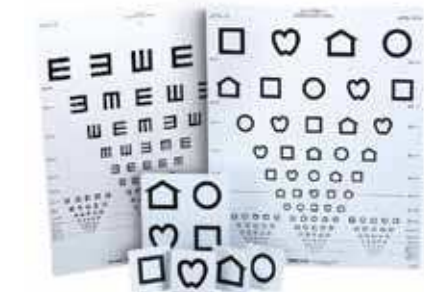
..... **271100**



### Sloan Letters Folding Chart (3 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. 145.7 cm x 45.7 cm; folds to 45.7 cm x 22.9 cm.

..... **735000**



### Combination LEA Symbols & Tumbling E or LEA Symbols & Landolt C Wall Chart (3 meters)

Combination distance visual acuity wall charts for 3 meters with either LEA Symbols and Tumbling E or LEA Symbols and Landolt C. Charts are proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50 for



### Pacific Acuity Test (PAC Test)

The Pacific Acuity Test is a vanishing figures optotype test designed with opposing figures to provide a simple forced-choice testing format appropriate for nonverbal children and individuals with developmental disabilities who are unable to respond to standard optotype recognition tests. Each card has two figures; a simple face, and an opposing oval target of the same overall size but with interior details that allow discrimination from the face at the threshold of acuity.

The full test kit consists of 18 cards with two cards at each level. The cards at each acuity level have a different position of the face target compared to the opposing oval figure. Each card can be presented at either 50 cm or 1 meter but the 1 meter test distance is recommended for greater accuracy and comparison to distance visual acuity tests.

The test range from 1.3 logMAR (20/400) down to 0 logMAR (20/20) allows for testing a broad range of visual acuity.

PAC Test comes with protective canvas case and isolation mask.

..... **360000**



LEA Symbols. Line sizes for both Tumbling E and Landolt C range from 20/200 to 20/10 (6/60 to 6/3) equivalent, 0.10 to 2.0. Wall Charts measure 43.18 cm x 53.34 cm and include response panel and flash cards.

Combination LEA Symbols & Tumbling E ..... **252800**

Combination LEA Symbols & Landolt C ..... **252850**

## Distance Acuity Handheld Tests



## Vision Screening Kit

**NOTE:** Available in EUROPE upon request only



The AAPOS Vision Screening Kit is for screening the vision of individuals beginning at age 3 through adulthood. Spiral-bound, multisided, distance visual acuity eye charts that can be hung on a wall or held in the hands. The distance charts contains both Full-Chart Threshold and Single Critical Line formats with the following optotypes:

- **Sloan Letters** for when children know their letters.
- **LEA Symbols** for preschoolers and for children who do not yet know their letters.

The AAPOS Vision Screening Kit includes Black Handheld Flip Paddle Occluder, Children's Fun Frames Occluder Glasses, 3 m cord for measuring, Translucent Response Panel, Instructions and DVD with additional information.

..... 120



## AAPOS Supplemental Screening Kit

**NOTE:** Available in EUROPE upon request only

The AAPOS Vision Screening Kit: Supplemental Screening Package is for screening the vision of individuals beginning at age 3 through adulthood.

The near vision chart contains both Full-Chart Threshold and Single Critical Line formats with the following optotypes:

- **Sloan Letters** for when children know their letters.
- **LEA Symbols** for preschoolers and for children who do not yet know their letters.

The AAPOS Supplemental Vision Screening Kit includes Black Handheld Flip Paddle Occluder, Children's Fun Frames Occluder Glasses, 16 Plate Color Vision Test, Random Dot Butterfly stereopsis test, Instructions and DVD with additional information.

..... 130

### LEA Symbols Crowded Symbol Book (3 meters)



Variant of the line test for children or adults who

have difficulty concentrating on a chart. The center symbol is surrounded on four sides by symbols of the same size. The interaction between the center symbol and the surrounding symbols is approximately the same as in a line test. The test size is convenient and easy to administer during screenings, home visits, and unique testing situations. Often, this is the first line test that can measure visual acuity of a young child with amblyopia, because the test produces the effect of crowding. Line sizes range from 20/63 to 20/16 (6/19 to 6/4.8) equivalent, 0.32 to 1.25. Includes response key, training cards, and instructions. 16 offset pages for easy flipping. 12.7 cm x 12.7 cm.

..... 250700

### LEA Symbols 50% Spaced Crowding Bars Book (3 meters)



This book features 50% spaced contour

interaction bars to provide single optotype acuity with the proper crowding effect. Optotype line sizes range from 20/100 to 20/20 (6/30 to 6/6) equivalent, 0.20 to 1.00. Includes response key, training cards, and instructions. 17 offset pages for easy flipping. 10.2 cm x 10.2 cm.

..... 259200



### LEA Symbols Flash Cards (3 meters)

This set of flash cards was designed for testing distance visual acuity in children and adults who have difficulty with visual acuity charts, the Crowded Symbol Book test as in: Crowded Symbol Book test or the Single Symbol Book test. Line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. Includes response key, training cards, and instructions. 30 cards per set, 10 cm x 12.7 cm to 12.7 cm x 12.7 cm.

..... 252700



### LEA Symbols or LEA Numbers Single Optotype Book (3 meters)

The Single Symbol or Numbers Book is ideal for people who cannot perform when tested with a line test. This book can help determine the best resolution of the visual pathway in a child/adult with amblyopia or impaired vision. Single optotype line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. Includes isolating mask, response key, training cards, and instructions. 13 offset pages for easy flipping. 12.7 cm x 12.7 cm.

LEA Symbols ..... 250600

LEA Numbers ..... 274000



### LEA Symbols Distance Vision Screener (3 meters)

This test is designed for amblyopia testing or screening. The background is gray with the exception of a white rectangle spaced at 50% surrounding each line of symbols. Line sizes range from 20/80 to 20/16 (6/24 to 6/4.8) equivalent, 0.25 to 1.25. Includes response key and training cards. Pages are offset for easy flipping. Instructions are printed on the inside cover. 10 pages, 8.25 cm x 22.9 cm.

..... 259900

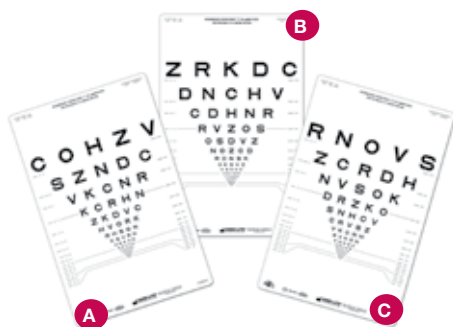
## Intermediate Distance Charts

### 80 cm and 66 cm Sloan Letters Intermediate Distance Charts

Charts calibrated to test visual acuity at an intermediate distance of 80 cm or 66 cm. Charts are available in 3 scrambled versions for repetitive testing situations. Sloan Letters optotypes with proportionally spaced lines; line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent. Notations for Letter Size, Decimal, and logMAR are also on the chart. Chart fits in Quantum Series, Model A+, and Model A illuminated cabinets. Chart size is 22.9 cm x 35.6 cm. 80 cm testing distance.

### 80 cm Intermediate Distance Charts

**NOTE:** Available in EUROPE upon request only



- A** 80 cm Chart 1 ..... **758400**
- B** 80 cm Chart 2 ..... **758500**
- C** 80 cm Chart 3 ..... **758600**

### 66 cm Intermediate Distance Charts

**NOTE:** Available in EUROPE upon request only



- D** 66 cm Chart 1 ..... **758410**
- E** 66 cm Chart 2 ..... **758510**
- F** 66 cm Chart 3 ..... **758610**

## Near Vision Charts for ESV1200 & Model A+



### LEA Symbols Near Vision Chart

**NOTE:** Available in EUROPE upon request only

Proportionally spaced (logMAR) lines; line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent. Chart fits in Quantum Series, Model A+, and Model A illuminated cabinet. Chart size is 22.9 cm x 35.6 cm. Includes response panel and flash cards.

..... **257800**

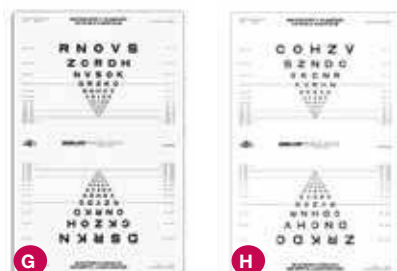


### LEA Numbers Near Vision Chart

**NOTE:** Available in EUROPE upon request only

Proportionally spaced (logMAR) lines; line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent. Chart fits in Quantum Series, Model A+, and Model A illuminated cabinet. Chart size is 22.9 cm x 35.6 cm.

..... **273000**



### Sloan Letter Near Vision Charts

**NOTE:** Available in EUROPE upon request only

Proportionally spaced (logMAR) lines; line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent. Chart fits in Quantum Series, Model A+, and Model A illuminated cabinet. Chart size is 22.9 cm x 35.6 cm.

- G**..... **756300**
- H**..... **756400**

## Near Vision Acuity Cards for 40 centimeters



### LEA Symbols Near Vision Card (40 centimeters)

This test assesses a child's functional vision at near distances. Can also be used to familiarize child with testing procedure before introducing a distance test.

Proportionally spaced (logMAR) lines on one side and more tightly-spaced symbols on the opposite side. Line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Response key printed on test card. Includes training cards and instructions. Card measures 20.3 cm x 25.4 cm.

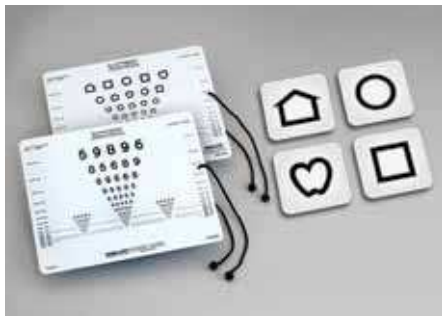
..... **250800**



### LEA Symbols Near Vision Screener (40 centimeters)

This test is designed for amblyopia testing or screening. The background is grey with the exception of a white rectangle spaced at 100% surrounding each line of symbols. Line sizes from 20/400 to 20/16 (6/120 to 6/4.8) equivalent, 0.05 to 1.25. Printed on two sides. Response key is printed on the test card. Includes training cards and instructions. Screener measures 20.3 cm x 25.4 cm.

..... **252000**



## LEA Symbols & LEA Numbers Near Vision Card (40 centimeters)

This card combines a LEA Symbols line test on one side and a LEA Numbers line test on the other. Proportionally spaced (logMAR) lines from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Response key is printed on the test card. Training cards and instructions included. Card measures 20.3 cm x 25.4 cm.

..... 251000



## LEA Numbers Near Vision Card (40 centimeters)

Proportionally spaced (logMAR) lines on one side and more tightly-spaced numbers on the other. Line sizes from 20/400 to 20/10 (6/120 to 6/3) equivalent, .05 to 1.25. Card measures 20.3 cm x 25.4 cm.

..... 270900



## Sloan Letters Near Vision Card (40 centimeters)

Proportionally spaced (logMAR) lines; line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Printed on both sides. 17.8 cm x 22.9 cm.

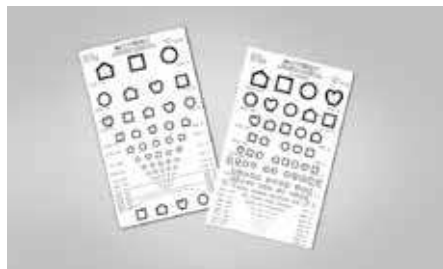
..... 729000



## Landolt C and Tumbling E Near Vision Pocket Card (40 centimeters)

Proportionally spaced (logMAR) lines; line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Printed on both sides. 17.8 cm x 22.9 cm.

..... 728000



## LEA Symbols Near Vision Pocket Card (40 centimeters)

Use this small pocket card to quickly determine whether a child's visual acuity is within the normal range. Proportionally spaced (logMAR) lines on one side and 50% spaced symbols on the opposite side. Line sizes from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Measures 9.5 cm x 15.9 cm.

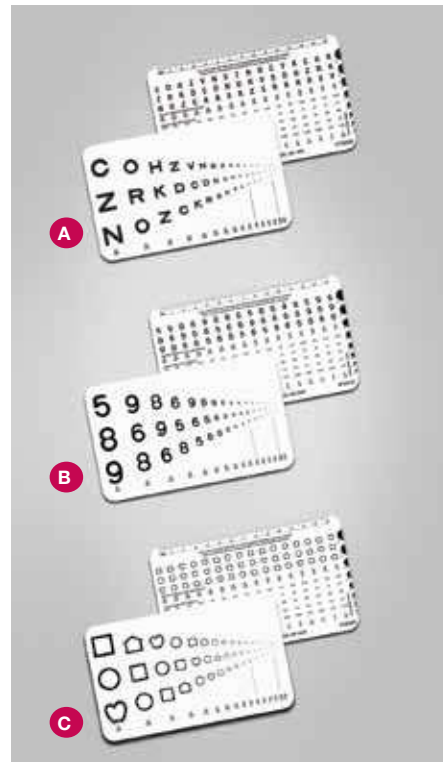
..... 250950



## LEA Numbers Pocket-Sized Near Vision Card (40 centimeters)

Use this small pocket card to quickly discover whether a child's or an adult's visual acuity is within the normal range. Proportionally spaced (logMAR) lines on one side and more tightly-spaced numbers on the other. Line sizes from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00 . Measures 9.5 cm x 15.9 cm.

..... 271000



## Runge Near Vision Pocket Card (40 centimeters)

Sloan Letters, LEA Numbers, or LEA Symbols Pocket Near Cards with line sizes ranging from 20/500 to 20/16 equivalent, 0.04 to 1.25 at 40 cm. Near acuity measurements and their equivalents are listed on reverse side. 9.5 cm x 15.9 cm.

- A** Sloan Letters ..... 756000
- B** LEA Numbers ..... 756100
- C** LEA Symbols ..... 756200

## Near Vision Pocket Cards for 40 cm



### Sloan Letters and Landolt C Near Vision Pocket Card (40 centimeters)

This easy-to-use visual acuity near vision card features Landolt C on one side and Sloan Letters on the other. Both sides have optotypes in proportionally spaced (logMAR) lines with line sizes ranging from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Card size is 9.5 cm x 15.9 cm. Testing distance is 40 cm.

..... **758300**



### Landolt C Near Vision Pocket Card (40 centimeters)

This easy-to-use visual acuity near vision card features Landolt C. Both sides have optotypes in proportionally spaced (logMAR) lines with line sizes ranging from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Card size is 9.5 cm x 15.9 cm.

..... **758700**



### Spanish Sloan Letters Near Vision Pocket Card (40 centimeters)

**NOTE:** Available in EUROPE upon request only

Sloan Letters with line sizes of 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00 on one side. Continuous text in Spanish is printed on the reverse side with line sizes 20/80 to 20/16. 9.5 cm x 16 cm.

..... **745000**



### LEA Symbols Playing Cards

These specially designed playing cards make it easy to measure near visual acuity in young children, while teaching concepts of similar/different, big/small, bigger/smaller. The 4 packs contain 16 cards each with symbols of varying sizes: 16M and 10M, 6.3M and 4M, 2.5M and 1.6M, and 1M and 0.63M. Includes training cards and instructions. The paper cards measure 4 cm x 7 cm.

..... **252500**



### LEA Symbols Domino Cards

Assess the near visual acuity of 2- and 3-year-old children, or use the cards at any age (older than 2+ years) to train an amblyopic eye. Set contains 3 packs of 16 domino-like cards with a large symbol at one end and a small symbol at the opposite end. Symbol sizes are 3.2M and 0.8M, 2.0M and 0.5M, and 1.25M and 0.3M. Each symbol on the card is printed with its M unit, decimal value, 6 meter equivalency for visual acuity value at 40 cm testing distance. Includes training cards and instructions. Paper cards measure 4 cm x 7 cm.

..... **251500**



### LEA Symbols and Landolt C Near Vision Pocket Card (40 centimeters)

This easy-to-use visual acuity near vision card features Landolt C on one side and LEA Symbols pediatric symbols on the other. Both sides have optotypes in Proportionally spaced (logMAR) lines with line sizes ranging from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Card size is 9.5 cm x 15.9 cm.

..... **257900**



### Measuring Cord

Measuring cord in various lengths ensuring proper visual testing or screening distance.

- 1 meter ..... **710001**
- 3 meters ..... **710003**
- 4 meters ..... **710004**
- 6 meters ..... **710006**
- 40 cm ..... **710040**
- 60 cm ..... **710060**
- 66 cm ..... **710066**
- 80 cm ..... **710080**



### LEA Numbers and Landolt C Near Vision Pocket Card (40 centimeters)

This easy-to-use visual acuity near vision card features Landolt C on one side and LEA Numbers on the other. Both sides have optotypes in proportionally spaced (logMAR) lines with line sizes ranging from 20/400 to 20/10 (6/120 to 6/3) equivalent, 0.05 to 2.00. Card size is 9.5 cm x 15.9 cm.

..... **273100**

## Low Vision Charts



### LEA Symbols Chart for Low Vision Rehabilitation (40 inches/1 meter)

This low vision test is designed for examining children and adults with severe visual impairments. The largest symbols are 50M in size, corresponding to 1/50 (20/1000, 6/300, 0.02). The smallest symbols are 1M in size, corresponding to 1/1 (20/20, 6/6, 1.00) at a distance of 1 meter. The test comes with attached cord to maintain the proper testing distance. Includes response key, training cards, and instructions. Designed courtesy of August Colenbrander, MD. Chart measures 40.7 cm x 54.6 cm. Folds to 40.7 cm x 27.3 cm.

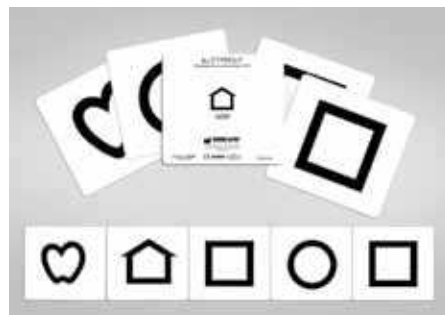
.....258000



### LEA Numbers Chart for Low Vision Rehabilitation (40 inches/1 meter)

This low vision test is designed for examining children and adults with severe visual impairments. The largest numbers are 50M in size corresponding to 1/50 (20/1000, 6/300, 0.02) and the smallest symbols are 1M in size corresponding to 1/1 (20/20, 6/6, 1.00) at a distance of 1 meter. The test comes with an attached cord to maintain the proper testing distance. Includes instructions. Designed courtesy of August Colenbrander, MD. 40.7 cm x 54.6 cm). Folds to 40.7 cm x 27.3 cm.

.....272100



### LEA Symbols Cards, 40M and 60M

These five LEA Symbols Cards can be used for presentation as single optotypes or arranged in a row as a line test. 60M cards are approximately 21.9 cm x 21.9 cm. 40M cards are approximately 15.25 cm x 15.25 cm.

.....256100



### LEA Numbers Cards, 40M and 60M

These five LEA Numbers Cards can be used for presentation as single optotypes or arranged in a row as a line test. 60M cards are approximately 15.25 cm x 22.9 cm. 40M cards are approximately 10.25 cm x 15.25 cm.

.....272400

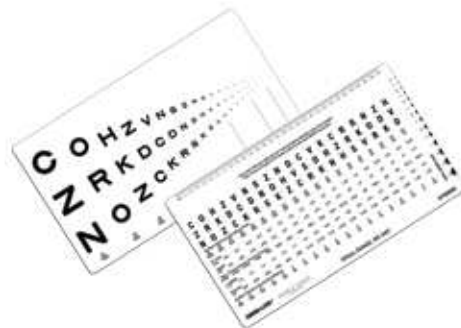


### Low Vision Reading Card

Available in either English or German language near vision reading card with 40 cm attached measuring cord for easy measurement. Chart contains continuous text and randomized words and numbers. Line sizes range from 20/320 to 20/16 (6/95 to 6/4.8) equivalent. The card also contains Letter Size, Decimal, logMAR, and M Size notations. Chart measures 25.5 cm x 38.5 cm.

English .....777001

German .....777000



### Runge Low Vision Near Card (40 centimeters)

**NOTE:** Available in EUROPE upon request only

This easy-to-use low vision card was developed to mimic reading from left to right. Printed answers on back of card allows the tester to follow the patient's testing results. The back includes Snellen, meters, decimal, logMAR, font size, Jaeger, and M unit notations. A ruler and pupil gage is also included.

Sloan Letters with line sizes ranging from 20/1000 to 20/16 (equivalent). 33 cm x 19 cm.

.....756900



## Low Contrast Charts



### LEA Symbols Low Vision Book

LEA Symbols low vision test is designed for examining children and adults with severe visual impairments. This complete book includes testing for 3 meters, 1.5 meters and for near vision at 40 cm. Distance testing line sizes range from 20/1600 to 20/16 equivalent, 0.25 to 1.25. Near vision testing line sizes range from 20/800 to 20/16 equivalent, 0.25 to 1.25.

This book comes bound either on the left side or top. Kit includes Butterfly occluder glasses for children and metal frame occluder glasses for adults are included.

#### Left-Side Bound

Book Only . . . . . **575500**

#### Top Bound

Book Only . . . . . **575600**



### LEA Numbers Low Vision Book

LEA Numbers low vision test is designed for examining children and adults with severe visual impairments. This complete book includes testing for 3 meters, 1.5 meters and 40 cm near vision. Distance testing line sizes range from 20/1600 to 20/16 equivalent, 0.25 to 1.25. Near vision testing line sizes range from 20/800 to 20/16 equivalent, 0.25 to 1.25.

This book comes bound either on the left side or top. Kit includes Butterfly occluder glasses for children and metal frame occluder glasses for adults are included.

#### Left-Side Bound

Book Only . . . . . **575300**

#### Top Bound

Book Only . . . . . **575400**

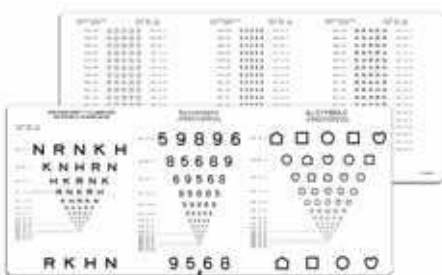


### 2.5% Low Contrast Combination LEA Symbols & Tumbling E or LEA Symbols & Landolt C Wall Chart (3 meters)

Combination distance visual acuity wall charts for 3 meters with 2.5% Low Contrast Optotypes. Charts contain either LEA Symbols and Tumbling E or LEA Symbols and Landolt C. Charts are proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50 for LEA Symbols. Line sizes for both Tumbling E and Landolt C range from 20/200 to 20/10 (6/60 to 6/3) equivalent, 0.10 to 2.0. Wall Charts measure 43.18 cm x 53.34 cm and include response panel and flash cards.

Combination LEA Symbols & Tumbling E . . . . . **254900**

Combination LEA Symbols & Landolt C . . . . . **254950**

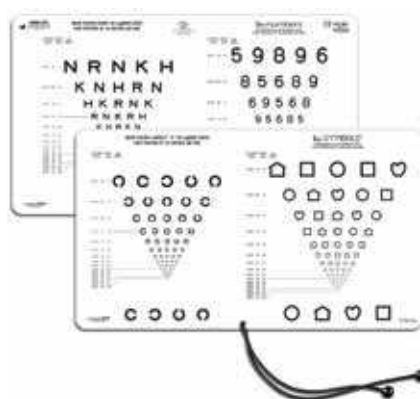


### Non-Verbal Near Visual Perception Test 3-1

The parallel arrangement of the letters, numbers and symbols allows for quick and discreet testing of near vision acuity in persons with perception and communication disorders (e.g. cerebral atrophy, dementia). For non-verbal communication the optotypes at the bottom of the card can be pointed on.

VA 0.05 to 2.0. Format: 43 cm x 19 cm with cord. Legend at the back which can also be used for training purposes.

. . . . . **759000**



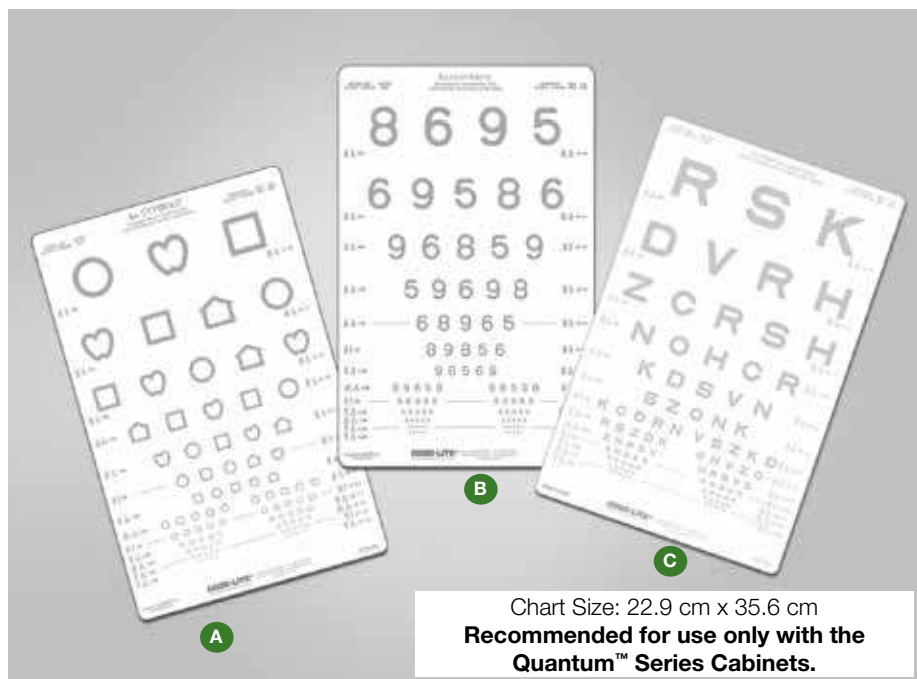
### Non-Verbal Near Visual Perception Test 4-1

The 4-1 near vision test has 4 optotypes each of letters and numbers on one page and Landolt Rings and LEA symbols on the other. It serves as an alternative to the 3-1 chart.

VA 0.05 to 2.0. Format: 43 cm x 19 cm with cord.

. . . . . **759100**

## Low Contrast Charts



### Translucent Low Contrast Charts (3 meters)

A low contrast test is a special way to measure visual acuity by determining how well eyes function in low light situations and/or the ability to distinguish objects from similarly colored or shaded backgrounds. Testing is identical to the measurement of visual acuity at high contrast levels. The 2.5% test is the most practical test in clinical use. Available in 5 contrast levels: 1.25%, 2.5%, 5%, 10%, and 25%. LEA Symbols charts include response key and training cards. All contrast charts include recording forms and instructions.

#### A LEA Symbols\*

|                             |               |
|-----------------------------|---------------|
| 1.25% (not shown) . . . . . | <b>253700</b> |
| 2.5% (shown) . . . . .      | <b>253800</b> |
| 5% (not shown) . . . . .    | <b>253900</b> |
| 10% (not shown) . . . . .   | <b>254000</b> |
| 25% (not shown) . . . . .   | <b>254100</b> |

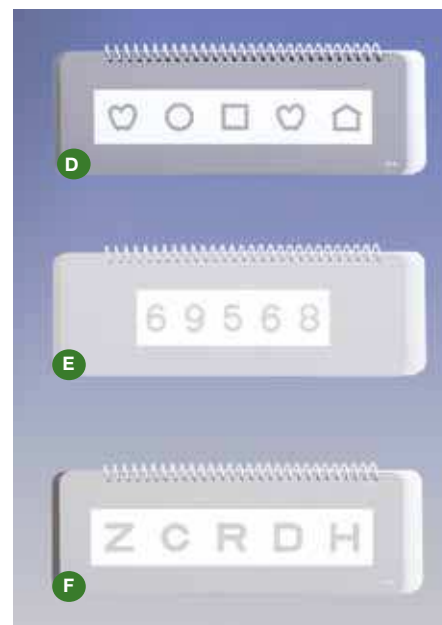
\*LEA Symbols charts come with both response panel and training cards.

#### B LEA Numbers

|                             |               |
|-----------------------------|---------------|
| 1.25% (not shown) . . . . . | <b>271500</b> |
| 2.5% (shown) . . . . .      | <b>271600</b> |
| 5% (not shown) . . . . .    | <b>271700</b> |
| 10% (not shown) . . . . .   | <b>271800</b> |
| 25% (not shown) . . . . .   | <b>271900</b> |

#### C Sloan Letters

|                             |               |
|-----------------------------|---------------|
| 1.25% (not shown) . . . . . | <b>600754</b> |
| 2.5% (shown) . . . . .      | <b>600753</b> |
| 5% (not shown) . . . . .    | <b>600752</b> |
| 10% (not shown) . . . . .   | <b>600751</b> |
| 25% (not shown) . . . . .   | <b>600750</b> |



### Low Contrast Flip Charts

A low contrast flip chart is an easy way to measure, record, and detect changes in the transfer of visual information when the change affects only visual acuity at low contrast levels. Chart presents LEA Symbols, LEA Numbers, and Sloan Letters at the following contrast levels: black, 25%, 10%, 5%, 2.5%, and 1.25%. Pages are offset for easy flipping. LEA Symbols contrast flip charts include response key and training cards. All flip charts include recording forms and instructions. 6 pages, 8.25 cm x 22.9 cm.

#### D LEA Symbols

|  |               |
|--|---------------|
| . . . . .                                    | <b>251100</b> |
| Mixed Order ( <i>Upon request only</i> ) . . | <b>251200</b> |

#### E LEA Numbers

|  |               |
|--|---------------|
| . . . . .                                    | <b>270400</b> |
| Mixed Order ( <i>Upon request only</i> ) . . | <b>270500</b> |

#### F Sloan Letters

|  |               |
|--|---------------|
| . . . . .                                    | <b>736000</b> |
| Mixed Order ( <i>Upon request only</i> ) . . | <b>737000</b> |



### Hiding Heidi Low Contrast Face Test

Visual communication is the most important communication method during the first year of life. The ability to detect objects of low contrast is an important component of the visual system. For example, facial expressions are mediated by faint shadows and changes in the contours of the mouth and eyes. Determining the levels of contrast that an infant can detect helps provide

baseline data for evaluating future changes. For example, deviations from usual behavior may indicate disorders that leave vision at high-contrast levels unaffected.

Four cards printed on both sides in the following contrast levels: black, 25%, 10%, 5%, 2.5%, and 1.25%. Cards are 23 cm x 23 cm. Includes instructions.

|           |               |
|-----------|---------------|
| . . . . . | <b>253500</b> |
|-----------|---------------|



**Evans Letter Contrast Test (ELCT)**

The Evans Letter Contrast Test (ELCT) chart is a standardized test for letter contrast sensitivity. The ELCT chart is designed to be used with either the ESV3000 or ESC2000 providing consistent lighting for improved testing results. The ELCT chart presents Sloan Letters optotypes line size of 20/630 with a testing distance of 1m. The varying contrast in sets of 3 letters of equal contrast level. All triplets are balanced for letter difficulty and differ in contrast by 0.15 log contrast step.



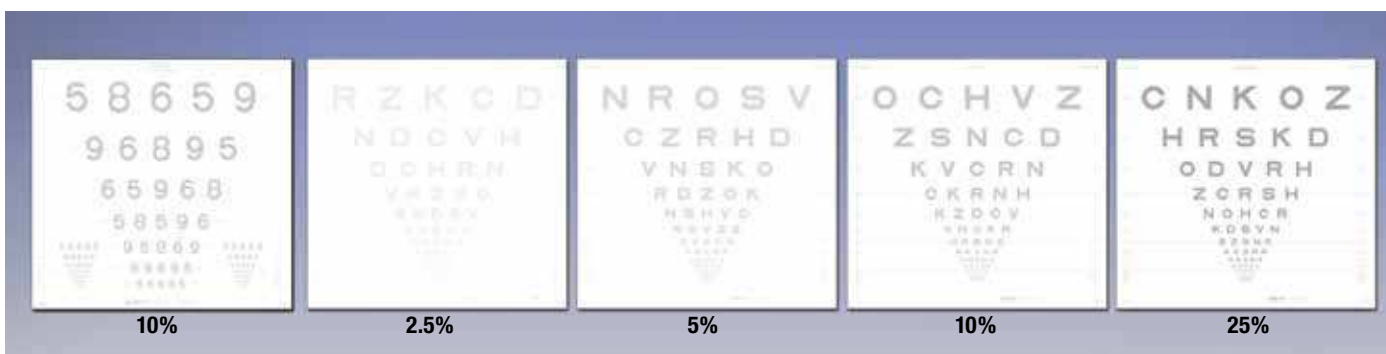
**ELCT Chart 1** contains 12 contrast levels ranging from standard 100% acuity to 1.65 log contrast or 2.24% contrast level. Studies show that 1.65 log contrast is the average letter contrast sensitivity for the normal older population. (Weber contrast calculation).

**ELCT Chart 2** presents 4 contrast levels from 1.8 to 2.25 log contrast.

ELCT charts are available as either Chart 1 only or as a set of both Chart 1 and Chart 2. Kit with charts and ESV3000 are also available that include ESV3000 Standardized Cabinet, remote control and floor stand.

**ELCT Charts Only**

- Chart 1 Only . . . . . **500331**
- Chart 2 Only . . . . . **500332**
- Set with Chart 1 and Chart 2 . . . . . **500330**



**Low Contrast Translucent ETDRS Charts from Good-Lite**

Good-Lite offers a wide selection of low contrast charts to fit your testing needs. Charts are available in different contrast levels and testing distances.

All charts are proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/10 (6/60 to 6/3) equivalent, 0.10 to 2.00. 62 cm x 65 cm.

**4 meters Testing Distance**

- Sloan Letters Optotype
- 1.25% . . . . . **500022**
- 2.5% . . . . . **500021**
- 5% . . . . . **500020**
- 10% . . . . . **500019**
- 25% . . . . . **500023**

**4 meters Testing Distance**

- LEA Numbers Optotype
- 2.5% . . . . . **274200**
- 10% . . . . . **274300**

Low Vision Lamps from



**Ultra Slim Magnifying Lamp XR**

With bright 28 watts daylight™ light, the unique 17.5 cm XR™ lens and the new Free-Motion head-joint™, this lamp combines the latest

innovations in lighting design. These new features make your lamp extremely easy to operate and reliable. Our XR technology™ makes the lens 50% lighter and easy to clean. And the new head-joint guarantees you precise and smooth positioning of your lamp without constantly having to tighten the wing-nut.

..... **022080**



**MAGnificent Floor/ Table LED Magnifying Lamp**

The MAGnificent Lamp is ideal for all types of hobbies, crafts and reading. By simply removing the pole, it converts from a floor to a table magnifying lamp. It provides 27

high performance, energy efficient daylight™ LEDs which only use 3 Watts of energy but provide 65 watts of traditional bulb light. The large 14.6 cm semi-rimless 1.75X magnifying lens allows close-work activity.

..... **025050**



**Foldi™ LED Lamp**

The portable LED Foldi™ Lamp features 30 bright daylight™ LEDs to give you comfortable full-spectrum natural daylight which is kind to your eyes, reducing glare which helps reduce eye strain, headaches and red-eye. The Foldi™ will give up to 8 hours of bright white light on batteries and unlimited power using the USB connection to your laptop, making it the ideal travel companion.

White..... **045000**  
Black..... **045001**



**Twist portable lamp**

daylight's™ popular portable lamp now comes with an ingenious Easy-Twist™ shade for maximum light angle and maximum work space! The 'Easy Twist' shade has been designed

by daylight™ to give you the ultimate spread of light across the whole of your work area. The lamp itself is lightweight and designed to fold neatly away, making it easy to transport. Now for the technical bit - this top lamp boasts even more practical features, all designed to make sure you craft in comfort. The lamps detachable base makes it extremely stable and with daylight™ technology there is absolutely no strobe effect so eyestrain is reduced and potential headaches are eliminated.

..... **033700**



**Flexi-vision Floor Lamp**

This product is the result of extensive research and collaboration with the RNIB and other low vision specialists. The Flexi-vision™ Floor Lamp regroups all the best features to make it the ultimate reading lamp. The 20 watts daylight™ energy saving bulb (285 watts equiv.) reduces glare and improves

contrast allowing you to read and write for a longer time in optimal comfort. With the new multi-swivel system and flexible arm, you can direct the light exactly where you need it and use this lamp near a sofa or at a table. The Flexi-vision™ Floor Lamp is also one of the safest lamps on the market with clear on/off switch location, anti-trip cable holders and low heat shade.

- Lamp brightness 8800 Lux at 15 cm and 2650 Lux at 30 cm
- Total amount of visible light emitted in Lumens is 1250 lm

..... **031067**

**PLEASE NOTE:**

All lamps come with CE mark and conformity, adjusted to European power supply.

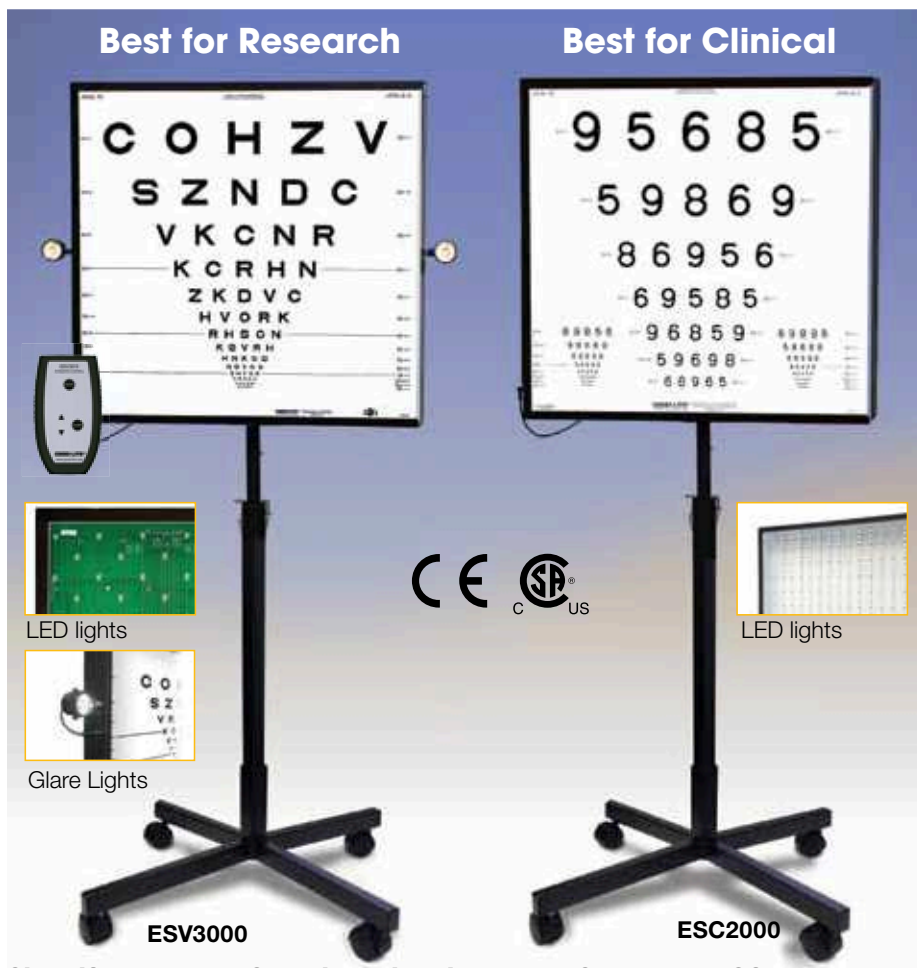


**The Swan Lamp**

The EasyTwist™ shade with extra long flexi-arm neck reach of 36 cm allows easy positioning of the powerful 18 watts energy saving light. The lamp also includes a crystal clear 1.75X magnification lens on a new longer removable 46 cm flexi-arm.

Table Lamp ..... **023020-01**  
Floor Lamp ..... **023030-01**

# ETDRS Illuminated Cabinet & Charts



## Simplify your ETDRS testing with either the ESV3000 or ESC2000

### ESV3000 ETDRS Illuminated Cabinet

Contains patented internal calibration technology, which automatically controls the standardized LEDs (light emitting diodes) output. When this lighting technology is combined with a universal standard power supply, the result is consistent standardized lighting that makes the ESV3000 the most accurate, easy-to-use tester for evaluating ETDRS and logMAR acuity. Simply turn on the device and with a push of a button, the ESV3000 automatically calibrates to a photopic light level of 85 cd/m<sup>2</sup> or a mesopic level of 3 cd/m<sup>2</sup>. These light levels are recommended by the National Academy

of Sciences' Committee on Vision Testing Standards.

### The ESC2000 Illuminator Cabinet

This is our more cost effective ETDRS Cabinet providing a uniform retro-illuminated testing surface, ideal for clinical testing of high contrast and low contrast logMAR tests, including ETDRS, Lea Symbols, Lea Numbers, Landolt C, etc. This makes it the perfect choice when precision calibrated luminance is not required.

Both measure 62 cm x 65 cm x 9.75 cm. CE and CSA listed.

| Compare Cabinets                       | ESV3000 with Calibrated LED Lights | ESC2000 with LED Lights |
|--|------------------------------------|-------------------------|
| Self Calibrate to 85 cd/m <sup>2</sup> | ✓ Yes                              | ✗ No                    |
| Provide Mesopic Testing                | ✓ Yes                              | ✓ Yes <sup>†</sup>      |
| Provide Uniform Light                  | ✓ Yes                              | ✓ Yes                   |
| Ready for Immediate Use                | ✓ Yes                              | ✓ Yes                   |
| Universal Power Supply                 | ✓ Yes                              | ✓ Yes                   |
| Custom Light Levels Available          | ✓ Yes                              | ✓ Yes                   |
| Built-in Glare Light Receptacle        | ✓ Yes                              | ✗ No                    |
| Remote Controlled                      | ✓ Yes                              | ✗ No                    |

### ESV3000 ETDRS Standardized Viewer

The only ETDRS viewing cabinet that self-calibrates illumination on the chart surface for both photopic (85 cd/m<sup>2</sup>) and mesopic (3 cd/m<sup>2</sup>) light level testing. The unit utilizes the most advanced self-monitoring LED light source patented technology, providing uniform and highly calibrated illumination across the entire testing surface (*Patent 5,078,486*).

### ESV3000 ETDRS Viewer Individual Items

ESV3000 ETDRS Standardized viewer only.\*  
 ..... **ESV3000**

### ESC2000 ETDRS Standardized Viewer

Our more cost effective ETDRS Viewer when calibrated light levels are not required.

### ESC2000 ETDRS Viewer Individual Items

ESC2000 ETDRS Standardized viewer only.\*  
 ..... **ESC2000**

<sup>†</sup> Manual user adjustment required.

\* Power plug adaptor may be needed for outlets outside the United States.

### Accessories and Options

#### ESV3000 Glare Lights



Easy-to-use Glare Lights simply plug in. Turn on and off remotely when used in conjunction with the ESV3000. Set of 2. Can only be used with the ESV3000.

..... **500100**



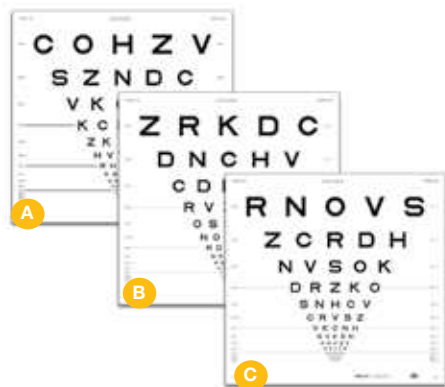
#### ESV3000 Floor Stand

ESV3000 Floor Stand with casters. The base of the stand measures 69.85 cm. The height is adjustable from a minimum of 83.82 cm to maximum of 124.46 cm.

..... **500004**

## 4 meters ETDRS Distance Charts

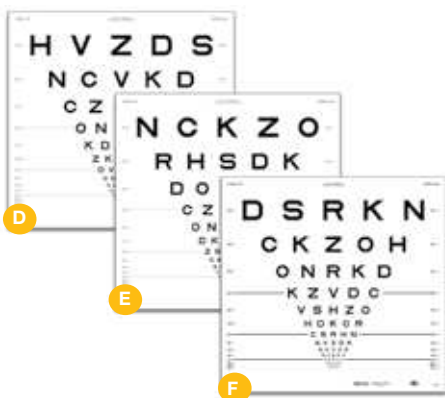
Chart Size: 62 cm x 65 cm



### "2000" Series ETDRS Translucent Distance Charts (4 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/10 (6/60 to 6/3) equivalent, 0.10 to 2.00. Revised version of the original ETDRS series based on more recent research.

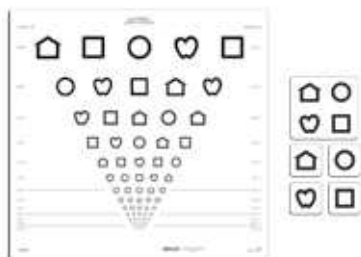
- A Chart "1" ..... 500016
- B Chart "2" ..... 500017
- C Chart "3" ..... 500018



### Original Series ETDRS Translucent Distance Charts (4 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/10 (6/60 to 6/3) equivalent, 0.10 to 2.00. Standardized format is used in National Eye Institute-sponsored clinical studies and in low vision evaluations when accurate and repeatable visual acuity measurements are needed.

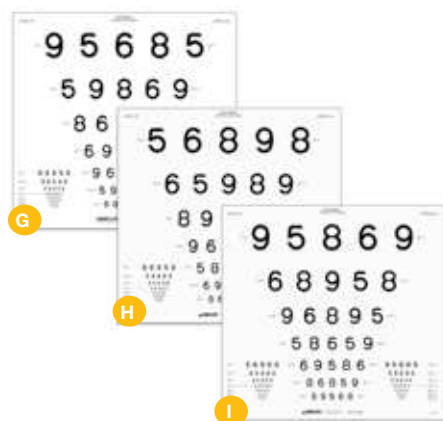
- D Chart "R" ..... 500013
- E Chart "1" ..... 500014
- F Chart "2" ..... 500015



### LEA Symbols ETDRS Translucent Distance Charts (4 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/160 to 20/8 (6/48 to 6/2.4) equivalent, 0.90 to 2.50. Includes response key, training cards, and instructions.

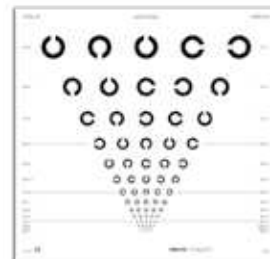
- ..... 253333



### LEA Numbers ETDRS Translucent Distance Chart (4 meters)

Proportionally spaced (logMAR) lines; lines range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. Chart is available in 3 scrambled versions for repetitive testing.

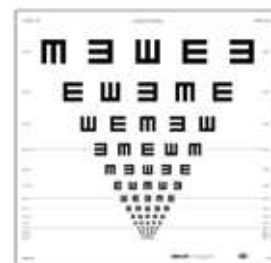
- G ..... 270200
- H ..... 270200A
- I ..... 270200B



### Landolt C ETDRS Translucent Distance Charts (4 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/10 (6/60 to 6/3) equivalent, 0.10 to 2.00.

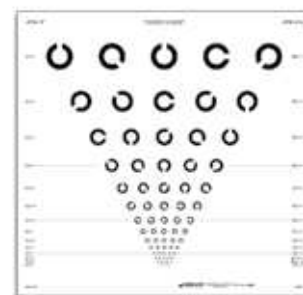
- ..... 500037



### Tumbling E ETDRS Translucent Distance Charts (4 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/10 (6/60 to 6/3) equivalent, 0.10 to 2.00.

- ..... 500044



### 8 Position Landolt Ring ETDRS Translucent Distance Charts (4 meters)

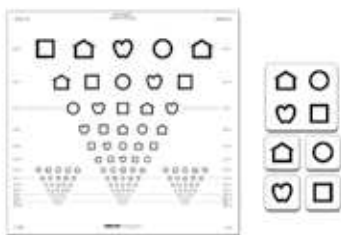
Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/10 (6/60 to 6/3) equivalent, 0.10 to 2.00.

- ..... 500070

**Note:** All charts, except for the low contrast charts, can be hung on a wall.

### 3 meters ETDRS Distance Charts

Chart Size: 62 cm x 65 cm



#### LEA Symbols ETDRS Translucent Distance Chart (3 meters)

Proportionally spaced (logMAR) lines; lines range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50. Includes response key, training cards, and instructions. 62 cm x 65 cm.

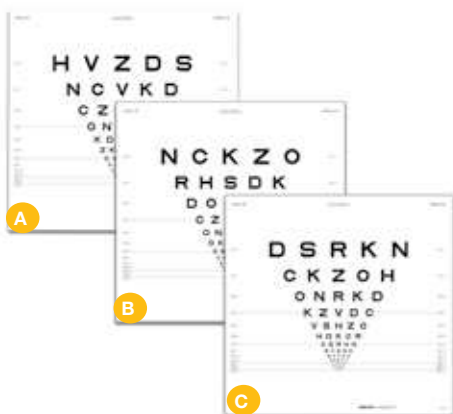
.....250300



#### LEA Numbers ETDRS Translucent Distance Chart (3 meters)

Proportionally spaced (logMAR) lines; lines range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50.

.....271400

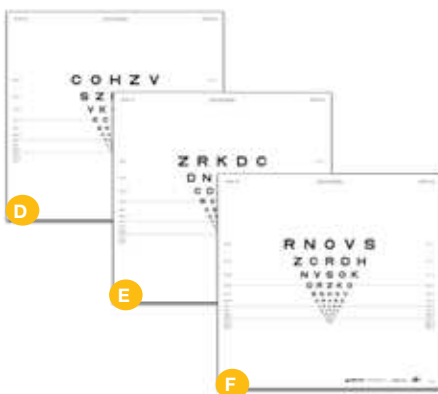


#### Original Series ETDRS Translucent Distance Charts (3 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/10 (6/60 to 6/3) equivalent, 0.10 to 2.00. Revised version of the original ETDRS series based on more recent research.

- A Chart "R" .....500046
- B Chart "1" .....500047
- C Chart "2" .....500048

### 2 meters ETDRS Distance Charts



#### "2000" Series ETDRS Translucent Distance Charts (2 meters)

**NOTE:** Available in EUROPE upon request only

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/10 (6/60 to 6/3) equivalent, 0.10 to 2.00. Revised version of the original ETDRS series based on more recent research.

- D Chart "1" .....500041
- E Chart "2" .....500042
- F Chart "3" .....500043



#### Original Series ETDRS Translucent Distance Charts (2 meters)

**NOTE:** Available in EUROPE upon request only

Proportionally spaced (logMAR) lines; line sizes range from 20/200 to 20/10 (6/60 to 6/3) equivalent, 0.10 to 2.00. Revised version of the original ETDRS series based on more recent research.

- G Chart "R" .....500038
- H Chart "1" .....500039
- I Chart "2" .....500040

### ETDRS Rollup Charts



#### ETDRS Translucent Distance Charts

Our standard ETDRS charts printed on a thinner styrene plastic allowing the chart to be easily rolled up for storage or transporting. Each chart comes with plastic wall hanging clip.

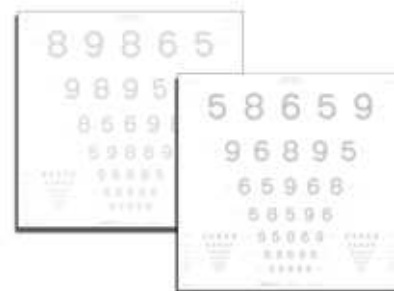
Each chart is proportionally spaced (logMAR) lines; lines range from 20/200 to 20/8 (6/60 to 6/2.4) equivalent, 0.10 to 2.50.

#### 4m ETDRS Charts

- Original Series Chart R .....511113
- Original Series Chart 1 .....511114
- LEA Numbers Chart .....270211

#### 3m ETDRS Charts

- LEA Symbols ETDRS Chart .....250311



**Low Contrast ETDRS Charts can be found on page 17!**

**Illuminated Cabinets and Charts, Quantum Series**

**Accessories**



**Stand for Professional, ESV1500 and ESV1200 Cabinets**

Add mobility to your light box with this deluxe universal 5-leg stand. Available with or without casters.

..... **705000**



**Adjustable Wall Mount for ESV1500 and ESV1200 Illuminated Cabinets**

This wall mount can easily adjust to patient's eye level for more accurate acuity testing or screening. Extends less than 10.2 cm from wall. This wall mount is for ESV1500 and ESV1200 illuminated cabinet only.

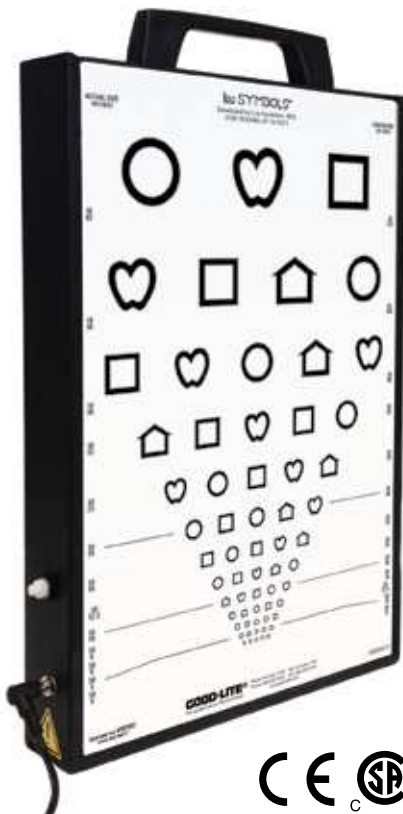
..... **706100**



**Canvas Carrying Case**

For ESV1500 and ESV1200 Illuminated Cabinets. Adjustable shoulder strap provides comfort when carrying an illuminated cabinet.

..... **904020**



Handle on top for easy transporting

Storage Compartment in back to hold your charts



Rows of LED lights for even illumination across entire surface of the chart

Only 8.3 cm thick



**ESV1200 Quantum™ Cabinet**

LEDs provide uniform illumination across the entire testing surface. Universal power supply automatically adjusts power. Can be powered by an optional battery pack. The ESV1200 has a compartment in back for

chart storage. Charts are not provided with this unit and must be ordered separately. 38.1 cm W x 23.5 cm H x 4.4 cm D. CE and CSA listed.

..... **ESV1200**



**ESV1500 Quantum™ Cabinet Calibrated for Research Vision Testing**

**NOTE:** Available in EUROPE upon request only

Similar to the ESV3000 using advanced patented technology, self-calibrating to provided consistent photopic (85 cd/m<sup>2</sup>) and mesopic (3 cd/m<sup>2</sup>) illumination on the chart surface. Controlled by infrared wireless remote. The ESV1500 has a compartment in back for chart storage. Charts are not provided with this unit and must be ordered separately. 38.1 cm W x 23.5 cm H x 8.3 cm D. CE and CSA listed.

..... **ESV1500**



**Similar to the ESV3000 found on page 19 but Portable!**



**Measuring Cord**

Measuring cord in various lengths ensuring proper visual testing or screening distance.

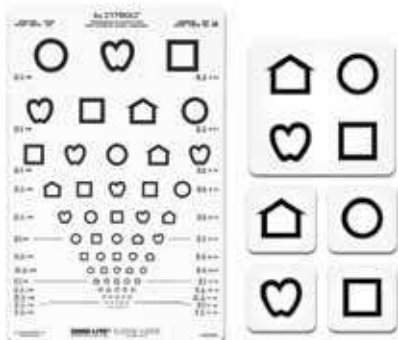
- 1 meter ..... **710001**
- 3 meters ..... **710003**
- 4 meters ..... **710004**
- 6 meters ..... **710006**
- 40 cm ..... **710040**
- 60 cm ..... **710060**
- 66 cm ..... **710066**
- 80 cm ..... **710080**



## ESV1500 and ESV1200 Translucent Charts

Chart Size: 22.9 cm x 35.6 cm

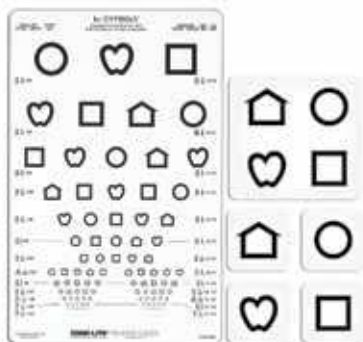
### 3 meters Distance Acuity Translucent Charts



#### LEA Symbols Set or Chart (3 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/125 to 20/8 (6/38 to 6/2.4) equivalent, 0.16 to 2.50. Set includes response key, training cards, and instructions.

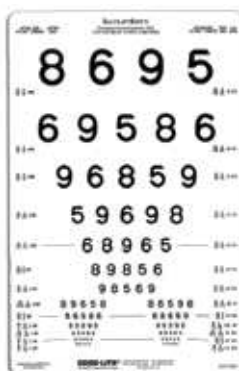
Set ..... **250400**  
Chart Only ..... **250401**



#### LEA Symbols Set or Chart (3 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/125 to 20/8 (6/38 to 6/2.4) equivalent, 0.16 to 2.50 with repetitive left eye/right eye groups. Includes response key, training cards, and instructions.

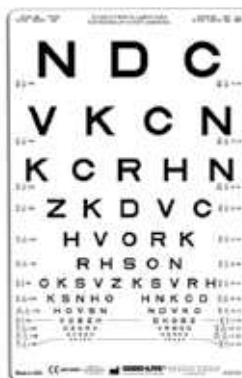
Set ..... **252400**  
Chart Only ..... **252401**



#### LEA Numbers Chart (3 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/125 to 20/8 (6/38 to 6/2.4) equivalent, 0.16 to 2.50.

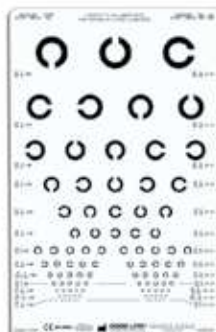
..... **271200**



#### Sloan Letters Chart (3 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/160 to 20/10 (6/48 to 6/3) equivalent, 0.12 to 2.00.

..... **600705**

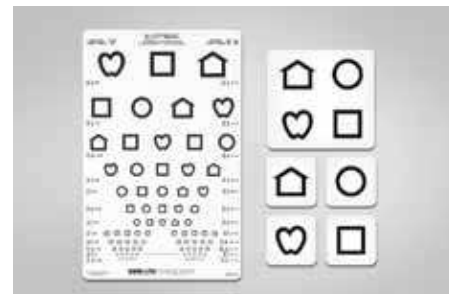


#### Landolt C Chart (3 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/160 to 20/10 (6/48 to 6/3) equivalent, 0.12 to 2.00.

..... **600703**

### 4 meters Translucent Distance Charts



#### LEA Symbols Set or Chart (4 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/100 to 20/8 (6/30 to 6/2.4) equivalent, 0.20 to 2.50. Set includes response key, training cards, and instructions.

Set ..... **255100**  
Chart Only ..... **255101**



#### A LEA Numbers Chart (4 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/100 to 20/8 (6/30 to 6/2.4) equivalent, 0.20 to 2.50.

..... **271300**

#### B Sloan Letters Chart (4 meters)

Proportionally spaced (logMAR) lines; line sizes range from 20/125 to 20/10 (6/38 to 6/3) equivalent, 0.16 to 2.00.

..... **600739**

## ESV1500 and ESV1200 Translucent Charts

Chart Size: 22.9 cm x 35.6 cm

### 6 meters Translucent Distance Charts

#### ESV1500 and ESV1200 Translucent Charts

Chart Size: 22.9 cm x 35.6 cm



#### Sloan Letters Chart (6 meters)

**NOTE:** Available in EUROPE upon request only

Proportionally spaced (logMAR) lines; line sizes range from 20/80 to 20/10 (6/24 to 6/4.8), 0.25 to 2.00. Lines are labeled with 20' notations only.

..... 600737



#### Measuring Cord

Measuring cord in various lengths ensuring proper visual testing or screening distance.

|                |        |
|----------------|--------|
| 1 meter .....  | 710001 |
| 3 meters ..... | 710003 |
| 4 meters ..... | 710004 |
| 6 meters ..... | 710006 |
| 40 cm .....    | 710040 |
| 60 cm .....    | 710060 |
| 66 cm .....    | 710066 |
| 80 cm .....    | 710080 |

### Intermediate Distance Charts

#### 80 cm and 66 cm Sloan Letters Intermediate Distance Charts

Charts calibrated to test visual acuity at an intermediate distance of 80 cm or 66 cm. Charts are available in 3 different scrambled versions for repetitive testing situations. Sloan Letters optotype with proportionally spaced lines; line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent. Notations for Letter Size, Decimal, and logMAR are also on the chart. Chart fits in Quantum Series, Model A+, and Model A illuminated cabinets. Chart size is 22.9 cm x 35.6 cm. 80 cm testing distance.

#### 80 cm Intermediate Distance Charts

**NOTE:** Available in EUROPE upon request only



- A 80 cm Chart 1 ..... 758400
- B 80 cm Chart 2 ..... 758500
- C 80 cm Chart 3 ..... 758600

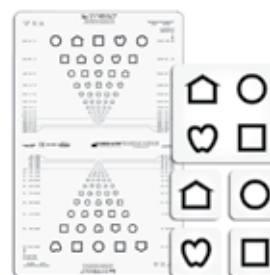
#### 66 cm Intermediate Distance Charts

**NOTE:** Available in EUROPE upon request only



- D 66 cm Chart 1 ..... 758410
- E 66 cm Chart 2 ..... 758510
- F 66 cm Chart 3 ..... 758610

## 40 centimeters Near Vision Charts

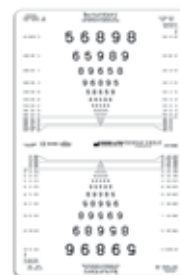


#### LEA Symbols Near Vision Charts

**NOTE:** Available in EUROPE upon request only

Proportionally spaced (logMAR) lines; line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent. Chart fits in Quantum Series, Model A+, and Model A illuminated cabinets. Chart size is 22.9 cm x 35.6 cm. 40 cm testing distance.

..... 257800

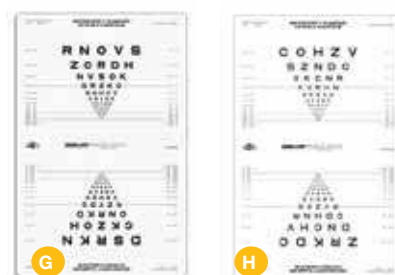


#### LEA Numbers Near Vision Charts

**NOTE:** Available in EUROPE upon request only

Proportionally spaced (logMAR) lines; line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent. Chart fits in Quantum Series, Model A+, and Model A illuminated cabinets. Chart size is 22.9 cm x 35.6 cm. 40 cm testing distance.

..... 273000



#### Sloan Letters Near Vision Charts

**NOTE:** Available in EUROPE upon request only

Proportionally spaced (logMAR) lines; line sizes range from 20/400 to 20/10 (6/120 to 6/3) equivalent. Chart fits in Quantum Series, Model A+, and Model A illuminated cabinets. Chart size is 22.9 cm x 35.6 cm. 40 cm testing distance.

- G..... 756300
- H..... 756400

## Super Pinhole Cabinet & Charts

**NOTE:** Available in EUROPE upon request only

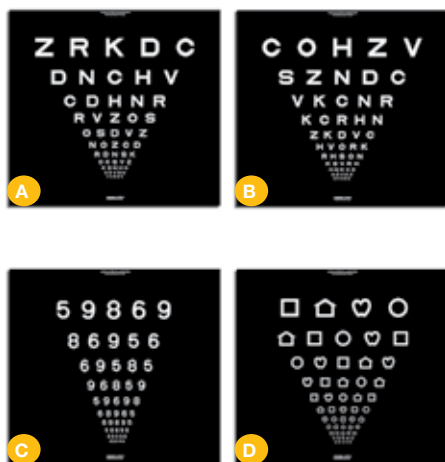


### Super Pinhole Macula Cabinet

**NOTE:** Available in EUROPE upon request only

This Cabinet can assist with testing potential visual acuity when considering cataract surgery for patients with retinal disease, such as macular degeneration. This greatly improved Super Pinhole Macula Cabinet provides uniform illumination across the entire chart. LEDs provide uniform illumination. Universal power supply. Sloan Letters Super Pinhole chart (300304), Extension Cord (300320), and Multiple Pinhole Occluder (700010) are included with the cabinet.

..... 300300



### Super Pinhole Macula Charts (1.5 meters)

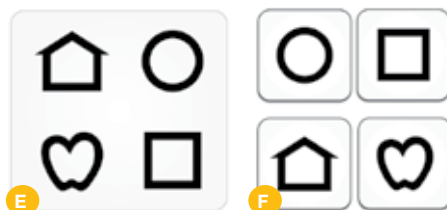
High contrast charts for the Super Pinhole Macula Cabinet. Optotypes are Proportionally spaced (logMAR) lines; line sizes ranging from 20/100 to 20/20 (6/30 to 6/6) equivalent, 0.25 to 1.25.

- A Sloan Letters ..... 300304
- B Sloan Letters Scrambled ..... 300305
- C LEA Numbers ..... 300306
- D LEA Symbols ..... 300307

### Replacement Extension Cord

Replacement extension cord for the Super Pinhole Macula Cabinet.  
..... 300320

### Replacement Response Panel and Flash Cards



### E LEA Symbols Clear Response Key

Response key with LEA Symbols. Printed on one side. Response Key is now translucent to allowing to easily view which optotype the child is pointing to.

..... 251701

### F LEA Symbols Training Cards

Training cards with LEA Symbols. Printed on one side.

..... 251800

## VectorVision CSV-1000 Contrast Sensitivity



Remote Control



### The New CSV-1000HGT

The CSV-1000HGT tests a combination of contrast and glare sensitivity providing the most accurate measure to evaluate cataracts, glaucoma, diabetic eye disease, contact lens performance, refractive surgery, etc. Patented photocell circuitry automatically monitors and calibrates instrument testing light levels. The CSV-1000HGT includes the following: CSV-1000HGT instrument, remote control (with battery), score pads, your choice of test face(s), and instruction manual.

### CSV-1000HGT Contrast Testing System

CSV-1000HGT Instrument with Glare Lights and 1 Test Face. Stand sold separately.

(shown) ..... 500050

### Accessories for CSV-1000

Floor Stand with Casters

..... 500004

### CSV-1000 Contrast Testing System

The CSV-1000 is the only self-standardized vision testing instrument. In each row of the device, photocell circuitry continually monitors and calibrates the instrument light level. This unique system senses both the external light striking the face of the instrument and the internal light which emanates from the miniature fluorescent bulbs. By measuring both light sources, the patented circuitry (U.S. Patent Number 5,078,486) determines the total light reflected from the instrument face and provides for a constant test luminance level of 85 cd/m<sup>2</sup>.

CSV-1000 Contrast Testing System comes with CSV-1000 unit and one contrast testing chart. Floor stand sold separately.

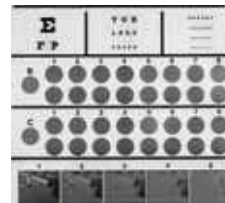
..... 500000



### CSV-1000 ETDRS Test Face

ETDRS acuity testing is the worldwide standard for visual acuity testing. The CSV-1000 ETDRS

test face provides standardized testing of ETDRS acuity. Three different ETDRS tests are available: Chart R, Chart 1, and Chart 2. Chart R ..... 500003

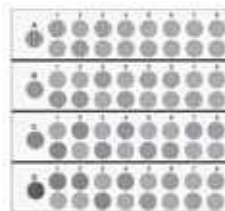


### CSV-1000S Test Face

The CSV-1000S test face is widely used for in- or out-of-office screenings and for cataract evaluations.

This test presents standard visual acuity from 20/15 to 20/200, 2 rows of spatial frequencies (6 and 12 cycles/degree), and a real-world driver's scene. The test is useful for cataract documentation because it provides a standard acuity score, a functional acuity score, and a real-world simulation.

..... 500001



### CSV1000E Contrast Chart

This test provides for 4 rows of sine-wave gratings. At the recommended test distance of 2.5 meters, these

gratings test the spatial frequencies of 3, 6, 12, and 18 cycles/degree. The CSV-1000E provides a full contrast sensitivity curve, which is useful for the evaluation of ocular disease (particularly cataracts, glaucoma, optic neuritis, diabetes, and macular degeneration), contact lenses, and refractive surgery. For cataract evaluation/documentation, a functional acuity score can be obtained directly from the test scoring sheet.

..... 500051

# Stereoacuity Screening and Testing



## Combination LEA Symbols and Stereo Fly Acuity Test

Tests designed to rapidly test for amblyopia and strabismus using gross thru fine stereopsis (4800 to 20 sec of arc). Graded circle test from 400 sec now down to 20 sec with no monocular clues. New improved booklet has answer key on back cover and includes both adult and child polarized viewers.

..... 100050



## Combination LEA Symbols and Stereo Butterfly Acuity Test

Tests designed to rapidly test for amblyopia and strabismus using gross thru fine stereopsis (2500 to 20 sec of arc).

Graded circle test from 400 sec now down to 20 sec with no monocular clues. New improved booklet has answer key on back cover and includes both adult and child polarized viewers.

..... 101050



## Random Dot E Stereoacuity Test

Designed to rapidly test for amblyopia and strabismus in early and non-readers and non-verbal children and adults. Choice of dot size acuity (standard and low vision). Includes adult and new child-friendly pediatric viewers with improved test frames.

..... 101550



## Random Dot 2 LEA Symbols Stereoacuity Test

Designed to rapidly test for amblyopia and strabismus in early and non-readers and non-verbal children and adults. Expanded random dot LEA test (500, 250, 125 sec of arc). Graded circle test now down to 12.5 sec with no monocular clues. New improved booklet has answer key on back cover and includes both adult and child polarized viewers.

..... 100750



## Random Dot 3 LEA Symbols Stereoacuity Test

Designed to rapidly test for amblyopia and strabismus in early and non-readers and non-verbal children and adults. Expanded Random Dot 3 with LEA Symbols tests gross disparity at 900, 650, 500 and 400 seconds of arc. Test children at 400, 200, 100 seconds of arc. Graded circle test now down to 12.5 seconds with no monocular clues. New improved booklet has answer key on back cover and includes polarized viewers.

..... 100900



## Stereo Vision Viewers

Polarized stereoacuity test viewers.

**A** Adult ..... 103050

**B** Intermediate..... 103175

**C** Children..... 103150



## PASS Test™ 2

Preschool Assessment of Stereopsis with a Smile (PASS) - Stereoacuity test for school assessment of stereopsis in children and non-readers. Includes: 4 Cards (480, 240, Demo, and Blank) with Carrying Case, 1 Pair Pediatric Polarized Viewers, and 1 Pair Intermediate Polarized Viewers.

This test is also part of the VIP Kit developed by the Vision in Preschoolers Study Group for screening the vision of preschoolers.

..... 101200



## PASS Test™ 3

Preschool Assessment of Stereopsis with a Smile (PASS) - Stereoacuity test for quantitative assessment of stereopsis in children and non-readers. Includes: 6 Cards (480, 240, 120, 60, Demo, and Blank) with Carrying Case, 1 Pair Pediatric Polarized Viewers, and 1 Pair Intermediate Polarized Viewers.

..... 101300



## Lichtenstein Fixation Box

The Lichtenstein Fixation Box gives you the added ability to test fusion, as well as to maintain fixation for your younger patients. The box contains a Worth 4-Dot examination, a white fixation light for adults and older children, and a fixation light that changes colors for strabismus measurements or refraction. LEDs provide increased bulb life. Universal power supply. 18.4 cm H x 15.3 cm W x 3.8 cm D. CE and CSA Listed.

..... 995000

## Color Vision Tests



### Good-Lite ColorCheck Complete Vision Screener

This test offers both LEA Numbers and Pediatric LEA Symbols screening for protan/deutan (red/green) and plates screening for tritan (blue/yellow). Color plates are larger making the screening of children, adults and low vision patients much easier.

Includes user-friendly instructions, tabbed sections, and protective coating on each test page.

..... **730050**

### Panel 16 Quantitative Color Vision Test

The Panel 16 Color Vision Test sets display the same hues as the Farnsworth D-15. The diameter of the stimulus area is 3.3 cm, and can be reduced by using dark gray restriction rings with an opening of 1.2 cm in diameter. Travel tube comes with black cloth.



#### Single Set

Includes 16 test caps, 16 restriction rings (B), acrylic case, cloth storage pouch, recording forms, and instructions.

**A** With Case ..... **260200**

**B** With Travel Tube. .... **260260**



#### Double Set

Includes 2 sets of 16 test caps (32 total), 32 restriction rings, acrylic case, cloth storage pouch, recording forms, and instructions.

**C** With Case ..... **260100**

**D** With Travel Tube ..... **260160**



### Confirmation Flippers

Individual flippers available in various lens configurations. Durable with a soft handle.

#### Individual Flipper Lens

- 127025** ..... +/- 0.25 Lens
- 127050** ..... +/- 0.50 Lens
- 127075** ..... +/- 0.75 Lens
- 127100** ..... +/- 1.00 Lens
- 127125** ..... +/- 1.25 Lens
- 127150** ..... +/- 1.50 Lens
- 127175** ..... +/- 1.75 Lens
- 127200** ..... +/- 2.00 Lens

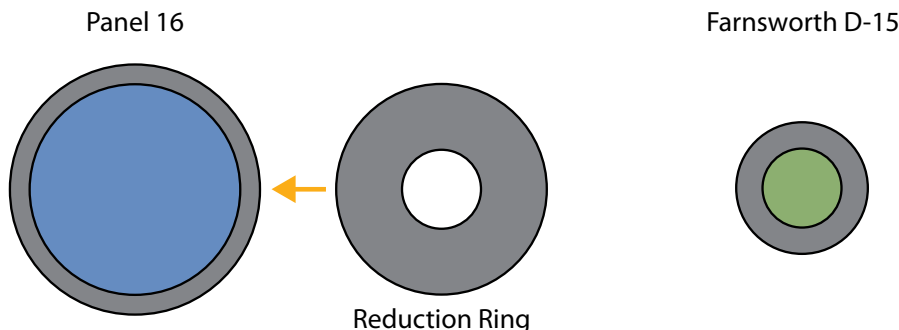


### Retinoscopy Paddles with Axis Compass

This two-paddle version has one paddle with plus lenses and the other for minus. Optics on both are 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 8.0, and 12. Includes 180° axis compass printed directly along the top of each paddle. Lenses are 16 mm diameter, recessed to help prevent scratching. Lenses are glass for greater accuracy and durability. Includes protective case.

..... **506600**

### Arrangement Color Vision Size Comparison



Good-Lite offers arrangement color tests with color chips in 2 sizes. The Panel 16 Quantitative Color Test measures 32 mm

in diameter with a "Reduction Ring" that restricts the target to the standard size of 12 mm.

## Occluders



### LEA Face Disposable Occluder

These easy-to-use disposable occluders are a perfect addition to any vision testing or screening program. Printed on sturdy card stock with LEA Smiling Face for fixation. Each package contains 50 occluders glued along the edge for easy storage.

..... 253200



### Opaque Plastic Occluders

Set of 6 in either black or gray.

Black ..... 751000

Gray ..... 750000

Available individually.

Black ..... 700545

Gray ..... 700544



### Multiple Pinhole Spectacle Occluder

Pinhole Spectacle ..... 700010

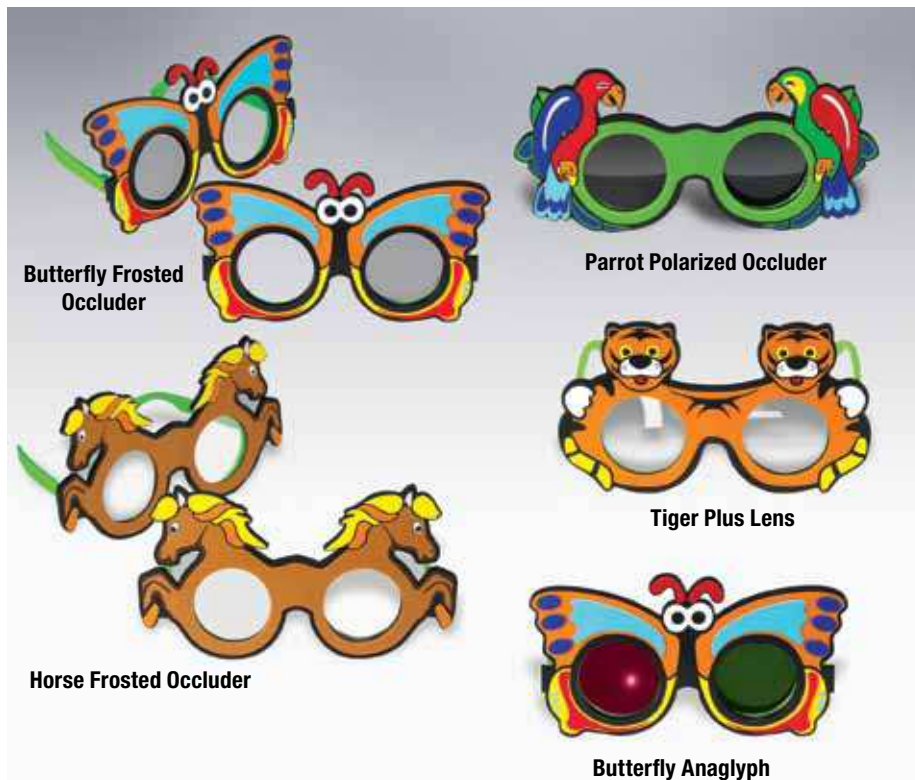
Spectacle Only ..... 700012



### Sunflower Occluder Glasses

These fun sturdy occluding glasses have flip-up sunflowers to permit occlusion of each eye. Supports 55 mm to 65 mm PD and recommended for children 3 years to 5 years old.

..... 548500



## Children's Vision Screening/Testing Fun Frames

Who said serious tests had to be done with boring test glasses? Add fun to your pediatric tests with our animal motif frames. Use these fun frames as occluders to increase testability, as pinhole occluders or hyperopia glasses, and during tests requiring anaglyph or

polarized glasses, such as stereoacuity tests. Occluders come in left and right pairs with the same frame style. These covered frames are more colorful than shown here and they are surprisingly durable! Not for possession by children below age 3.

| Lens Type        | Butterfly | Horse  | Parrot | Tiger  |
|------------------|-----------|--------|--------|--------|
| Frosted Occluder | 460811    | 460911 | 461011 | 461111 |
| Polarized        | 460400    | 462000 | 462100 | 460700 |
| Anaglyph         | 461200    | 461300 | 461400 | 461500 |
| +1.50 Hyperopia  | 516000    | 525900 | 525700 | 528900 |
| +2.00 Hyperopia  | 491000    | 491100 | 491200 | 491300 |
| +2.50 Hyperopia  | 500300    | 500400 | 500500 | 500611 |
| +3.00 Hyperopia  | 514900    | 515100 | 515000 | 515200 |



### Good-Lite Fixation Cubes

Easily maintain interest and fixation with these Good-Lite Fixation Cubes. Available as either white handled with LEA Symbols only or red handle with easy recognizable pictures and LEA Symbols on top of cube.

White Handle ..... 256400

Red Handle ..... 256300



### Measuring Cord

Measuring cord in various lengths ensuring proper visual testing or screening distance.

|          |        |
|----------|--------|
| 1 meter  | 710001 |
| 3 meters | 710003 |
| 4 meters | 710004 |
| 6 meters | 710006 |
| 40 cm    | 710040 |
| 60 cm    | 710060 |
| 66 cm    | 710066 |
| 80 cm    | 710080 |



## A GOOD-LITE Partnership for Products & Education



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