# Stereo Optical Company Vision Tester Slide Package:

### Industrial Slide Package

For complete occupational screening using accurate and easily understood targets to help determine effective vision. Includes Purdue Job Standards Booklet to easily identify individuals requiring further testing, for all occupations. Intermediate lenses available for VDT operators, which is the fastest growing population in the industry today. Now test distance, intermediate, and near point vision.

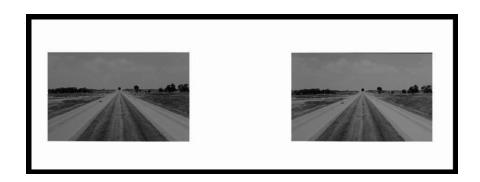
Slide # 1: 2000-147 Slide # 2: 2000-001 Slide # 3: 2000-008 Slide # 4: 2000-005 Slide # 5: 2000-024 Slide # 6: 2000-010 Slide # 7: 2000-025 Slide # 8: 2000-012 Slide # 9: 2000-002 Slide #10: 2000-009 Slide #11: 2000-006 Slide #12: 2000-013



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#### Slide 2000-147 "FAR" DEMONSTRATION SLIDE

- 1. Dial at 1 (Yellow) Indicator.
- 2. Far Point switch illuminated 🛧 🕽 🛊
- 3. Right and Left eye switches illuminated



This slide shows a summer afternoon, highway scene. It is meant to put the subject at ease, reduce tension, and adjust the subject's eyes to focus on the slides in the instrument.

QUESTION: What color do you see at the end of the highway?

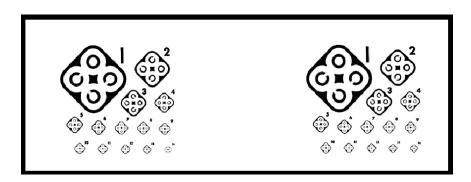
SCORING: If the subject sees a brown dot, then they are seeing with both eyes. If the subject sees only a green dot, they are seeing with the left eye. If the subject sees only a red dot, they are seeing with the right eye.

This test will quickly determine those with vision in only one eye, or those who use only one eye at a time. In these cases, the phoria and stereo depth tests, which require the use of both eyes simultaneously, can be omitted thereby avoiding further confusion by the subject.

NOTE: When administering the peripheral test, the subject should use the dark brown dot as a focal point.

# Slide 2000-001 "FAR" VISUAL ACUITY LANDOLT RINGS BOTH EYES

- 1. Dial at 2 (Yellow) indicator.
- 2. Far Point switch illuminated 4
- 3. Right and Left eye switches illuminated  $\bullet^{\mathsf{L}}$



Right and Left eye targets are identical and are fused into a single target.

QUESTION: Look at the first target, is the ring at the TOP broken like the other rings, or is it unbroken? Where is the unbroken ring in target #5? Is it at the BOTTOM, LEFT, TOP, or RIGHT? #6? #7? etc. Continue until the subject misses two consecutive answers. If the subject cannot read #5, go back to #4 or #3, until the ring can be correctly identified.

SCORING: Test until the subject misses two consecutive answers. Put a slash through the number of the last correct answer. When the subject misses one, but answers the next one correctly, continue until the subject misses two consecutive answers. This applies even if it happens again in the same test.

TARGET 1	2	3	4	5	6	7	8	9	10	11	12	13	14
Key T	R	R	L	T	B	L	R	L	B	R	B	T	R
Acuity <u>20</u>	20	<u>20</u>	20	20	20	20	20	20	20	20	20	20	20
Level 200	100	70	50	40	35	30	25	22	20	18	17	15	13

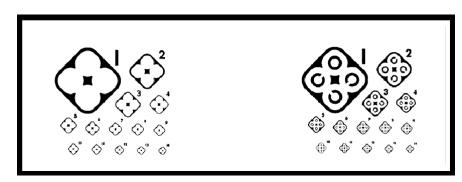
### Slide 2000-008 "FAR" VISUAL ACUITY LANDOLT RINGS RIGHT EYE

- 1. Dial at 3 (Yellow) indicator.
- 2. Far Point switch illuminated



3. Right and Left eye switches illuminated





This test is administered with both eyes open, although only the right eye sees the target, the left eye sees the background pattern, and together they fuse into one target.

QUESTION: Look at the first target, is the ring at the TOP broken like the other rings, or is it unbroken? Where is the unbroken ring in target #5. Is it at the BOTTOM, LEFT, TOP, or RIGHT? #6? #7? etc. Continue until the subject misses two consecutive answers. If the subject cannot read #5, go back to #4 or #3, until the ring can be correctly identified.

If subject experiences difficulty in seeing the targets (scoring less than 8), occlude the left eye and retest the right eye, recording both scores. In the event of right eye suppression, the score can improve considerably when the left eye is occluded.

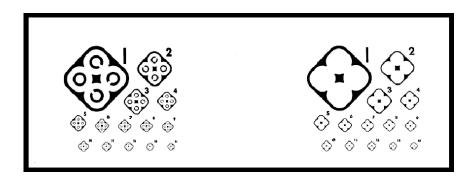
SCORING: Test until the subject misses two consecutive answers. Put a slash through the number of the last correct answer. When the subject misses one, but answers the next one correctly, continue until the subject misses two consecutive answers. This applies even if it happens again in the same test.

TARGET 1	2	3	4	5	6	7	8	9	10	11	12	13	14
Key T	L	Т	Т	В	В	L	В	R	Т	R	L	В	R
Acuity 20	<u>20</u>												
Level 200	100	70	50	40	35	30	25	22	20	18	17	15	13

### Slide 2000-005 "FAR" VISUAL ACUITY LANDOLT RINGS LEFT EYE

- 1. Dial at 4 (Yellow) indicator.
- 2. Far Point switch illuminated





This test is administered with both eyes open, although only the left eye sees the target, the right eye sees the background pattern, together they fuse into one target.

QUESTION: Look at the first target, is the ring at the TOP broken like the other rings, or is it unbroken? Where is the unbroken ring in target #5? Is it at the BOTTOM, LEFT, TOP or RIGHT? Do the same for #6, #7, etc. Continue until the subject misses two consecutive answers. If the subject cannot read #5, go back to #4 or #3, until a ring can be correctly identifed.

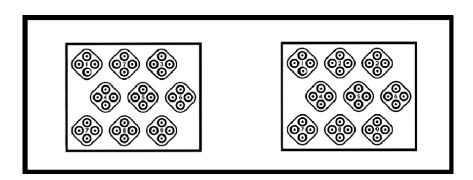
If the subject experiences difficulty in seeing the targets (scoring less than 8), occlude the right eye and retest the Left eye, recording both scores. In the event of Left eye suppression, the score can improve considerably when the right eye is occluded.

SCORING: Test until the subject misses two consecutive answers. Put a slash through the number of the last correct answer. When the subject misses one, but answers the next one correctly, continue until the subject misses two consecutive answers. This applies even if it happens again in the same test.

TARGET 1	2	3	4	5	6	7	8	9	10	11	12	13	14
Key L	R	L	В	R	Т	Т	В	R	Т	В	R	Т	L
Acuity 20	20	20	20	20	20	20	<u>20</u>	20	20	20	20	20	20
Level 200	100	70	50	40	35	30	25	22	20	18	17	15	13

#### Slide 2000-024 "FAR" STEREO DEPTH PERCEPTION

- 1. Dial at 5 (Yellow) indicator.
- 2. Far Point switch illuminated
- 3. Right and Left eye switches illuminated



This test measures binocularity. In order to perceive depth perception, both eyes are required to work together. Omit this test if there is little or no vision in one eye. The ability to judge relative distances without the aid of monocular clues is the goal of this stereotest. The difficulty to point out the "floating" ring increases in each of the nine steps in this series.

QUESTION: Study target #1. Does the bottom ring seem to be floating toward you? If the answer is YES, proceed with: In target #2, which ring is floating toward you? #3, #4? This test requires a little extra time, so being patient is extremely important. On occasion, the subject with good acuity scores will fail to fuse the left and right eye patterns and experience an overlapping of images. Turn the dial back to a test where the subject can stabilize fusion, then proceed.

SCORING: Reading all circles correctly through #9 is normal depth perception. Correctly answering through #5 is acceptable depth perception. When the subject misses two consecutive circles, go back to last answer as their correct score.

SIEF	REO DEF	THKE	Y						
1 B	2 L	3 B	4 T	5 T	6 L	7 R	8 L	9 R	TARGET
400	200	100	70	50	40	30	25	20	Angle of Stereopsis in seconds of arc
15	30	50	60	70	75	82	90	95	Shepard-Fry Percentages

The angle of Stereopsis: A defined depth, the greater the number, the more obvious the stereopsis.

Shepard-Fry Percentages: The amount of visual efficiency required to determine a particular angle of stereopsis-85% is considered average.

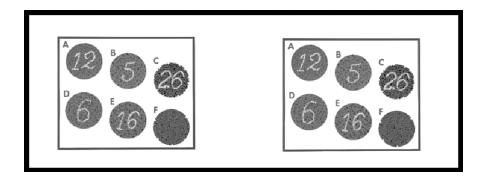
#### Slide 2000-010 "FAR" COLOR PERCEPTION

- 1. Dial at 6 (Yellow) indicator.
- 2. Far Point switch illuminated



3. Right and Left eye switches illuminated





This test is a screening for color perception. It will identify deficiencies, but it does not classify them. Six Pseudo-Isochromatic Ishihara Plates are accurately and authentically reproduced for this test. This test is set for a minimal visual acuity of 20/70. If a subject has 20/70 acuity or lower, the subject could fail the test because of low vision, not poor color perception.

QUESTION: Can you identify the numerals in each circle, starting with A?

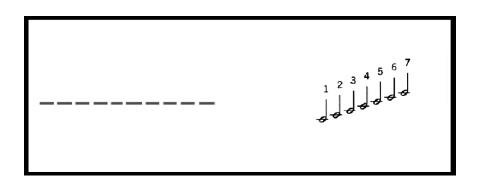
SCORING: There are a total of 8 numerals in the six circles. For normal color vision, circle F has no numerals in it, color deficients will read a 5. Color-normal subjects will answer the 8 numerals correctly and state there is nothing in circle F. 5 out of 8 numerals correct is mild color deficiency.

For the F.A.A. examination class, I, II, and III the applicant must identify all 8 numerals correctly.

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	TARGET	A= 12	B= 5	C= 26	D= 6	E= 16	F= Blank
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#### Slide 2000-025 "FAR" VERTICAL PHORIA

- 1. Dial at 7 (Yellow) indicator.
- 2. Far Point switch illuminated 4
- 3. Right Eye switch illuminated



This test measures how the eyes work together on the vertical plane. Musical notes are seen with the right eye, the series of red dashes with the left. Record the number of the notes through which the red line passes. The note precisely across from the red line is #4.

QUESTION: Do you see a series of musical notes? If yes, ask how many?

SCORING: Get the subject's initial response. The answer is 7. Tell the subject a red broken line will appear. Simultaneously turn the LEFT eye switch ON.

QUESTION: The line crosses the round part of which note?

SCORING: The red broken line passing through note #4 is ideal or orthophoric. Anywhere from 2.5 to 5.5 is the accepted norm. If the subject complains of movement, ask where the line was first seen.

Each number represents one half prism diopter of power, 1 to 4 indicates left hyerphoria, 4 to 7 indicates right hyperphoria.

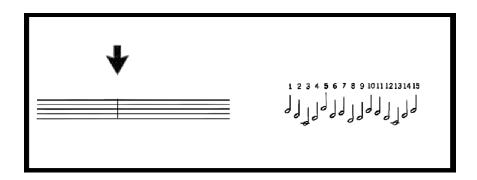
NOTE: This test cannot be given to a subject with vision in only one eye, this is a binocular test only.

#### Slide 2000-012 "FAR" LATERAL PHORIA

- 1. Dial at 8 (Yellow) Indicator.
- 2. Far Point switch illuminated 🛊 🖓 🏚



3. Right Eye switch illuminated of



This test measures the relative posture of the eyes in the lateral plane. The left eye sees a musical staff with a prominent arrow, the right eye sees numbered notes. With both eyes open, the subject will fuse the notes onto the staff. The arrow should point to the musical note #8.

QUESTION: Do you see a series of musical notes? If yes, ask how many?

SCORING: The answer is 15. Tell the subject a musical staff with a white arrow will appear. Simultaneously turn the LEFT eye switch ON, and ask which note the arrow is pointing to. The subject's initial response is the answer you are looking for. The arrow pointing to #8 is ideal or orthophoric, pointing between 3.5 and 12.5 is the accepted norm. 1 to 8 indicates esophoria, 8 to 15 indicates exophoria. Each number represents one prism diopter of power.

NOTE: This test cannot be given to a subject with vision in only one eye. This is a binocular test only.

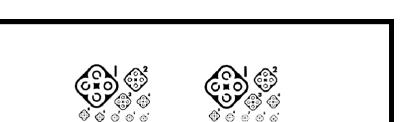
#### Slide 2000-002 "NEAR" VISUAL ACUITY LANDOLT RINGS **BOTH EYES**

- 1. Dial at 9 (Blue) indicator.
- 2. Near Point switch illuminated



3. Right and Left eye switches illuminated





Right and Left eye targets are identical and are fused into a single target.

QUESTION: Look at the first target, is the ring at the TOP broken like the other rings, or is it unbroken? Where is the unbroken ring in target #5. Is it at the BOTTOM, LEFT, TOP, or RIGHT? #6? #7? etc. Continue until the subject misses two consecutive answers. If the subject cannot read #5, go back to #4 or #3, until the ring can be correctly identified.

SCORING: Test until the subject misses two consecutive answers. Put a slash through the number of last correct answer. When the subject misses one, but answers the next one correctly, continue until the subject misses two consecutive answers. This applies even if it happens again in the same test.

TARGET 1	2	3	4	5	6	7	8	9	10	11	12	13	14
Key R	L	Т	R	В	R	Т	L	Т	L	В	R	В	L
Acuity <u>20</u> Level 200	<u>20</u> 100	<u>20</u> 70	<u>20</u> 50	<u>20</u> 40	<u>20</u> 35	<u>20</u> 30	<u>20</u> 25	<u>20</u> 22	<u>20</u> 20	<u>20</u> 18	<u>20</u> 17	<u>20</u> 15	<u>20</u> 13

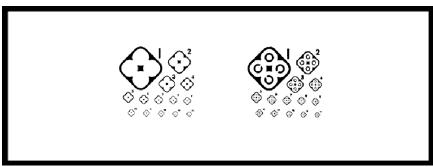
# Slide 2000-009 "NEAR" VISUAL ACUITY LANDOLT RINGS RIGHT EYE

- 1. Dial at 10 (Blue) indicator.
- 2. Near Point switch illuminated



3. Right and Left eye switches illuminated





This test is administered with both eyes open, although only the right eye sees the target, the left eye sees the background pattern, together they fuse into one target.

QUESTION: Look at the first target, is the ring at the TOP broken like the other rings, or is it unbroken? Where is the unbroken ring in target #5. Is it at the BOTTOM, LEFT, TOP, or RIGHT? #6? #7? etc. Continue until the subject misses two consecutive answers. If the subject cannot read #5, go back to #4 or #3, until the ring can be correctly identified.

If subject experiences difficulty in seeing the targets (scoring less than 8), occlude the left eye and retest the right eye, recording both scores. In the event of right eye suppression, the score can improve considerably when the left eye is occluded.

SCORING: Test until the subject misses two consecutive answers. Put a slash through the number of last correct answer. When the subject misses one, but answers the next one correctly, continue until the subject misses two consecutive answers. This applies even if it happens again in the same test.

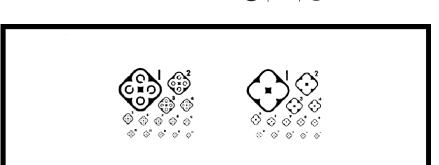
TARGET 1	2	3	4	5	6	7	8	9	10	11	12	13	14
Key T	В	Т	В	R	Т	R	L	В	L	R	R	L	Т
Acuity <u>20</u> Level 200	<u>20</u> 100	<u>20</u> 70	<u>20</u> 50	<u>20</u> 40	<u>20</u> 35	<u>20</u> 30	<u>20</u> 25	<u>20</u> 22	<u>20</u> 20	<u>20</u> 18	<u>20</u> 17	<u>20</u> 15	<u>20</u> 13

## Slide 2000-006 "NEAR" VISUAL ACUITY LANDOLT RINGS LEFT EYE

- 1. Dial at 11 (Blue) indicator.
- 2. Near Point switch illuminated.



3. Right and Left eye switches illuminated.



This test is administered with both eyes open, although only the Left eye sees the target, the Right eye sees the background pattern, together they fuse into one target.

QUESTION: Look at the first target, is the ring at the TOP broken like the other rings, or is it unbroken? Where is the unbroken ring in target #5. Is it at the BOTTOM, LEFT, TOP, or RIGHT? #6? #7? etc. Continue until the subject misses two consecutive answers. If the subject cannot read #5, go back to #4 or #3, until the ring can be correctly identified.

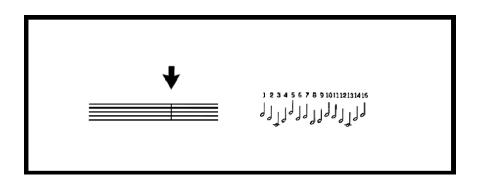
If subject experiences difficulty in seeing the targets (scoring less than 8), occlude the left eye and retest the right eye, recording both scores. In the event of right eye suppression, the score can improve considerably when the left eye is occluded.

SCORING: Test until the subject misses two consecutive answers. Put a slash through the number of last correct answer. When the subject misses one, but answers the next one correctly, continue until the subject misses two consecutive answers. This applies even if it happens again in the same test.

TARGET	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	B	L	В	R	T	L	T	В	R	R	L	R	T	L
•	<u>20</u> 200	<u>20</u> 100	<u>20</u> 70	<u>20</u> 50	<u>20</u> 40	<u>20</u> 35	<u>20</u> 30	<u>20</u> 25	<u>20</u> 22	<u>20</u> 20	<u>20</u> 18	<u>20</u> 17	<u>20</u> 15	<u>20</u> 13

#### **SLIDE 2000-013 "NEAR" LATERAL PHORIA**

- 1. Dial at 12 (Blue) Indicator.
- 2. Near Point switch illuminated
- 3. Right Eye switch illuminated



This test measures the relative posture of the eyes in the lateral plane. The left eye sees a musical staff with a prominent arrow. The right eye sees numbered notes. With both eyes open, the subject will fuse the notes onto the staff. The arrow should point to the musical note #8.

QUESTION: Do you see a series of musical notes? If yes, ask how many?

SCORING: The answer is 15. Tell the subject a musical staff with a white arrow will appear. Simultaneously turn the LEFT eye switch ON, and ask which note the arrow is pointing to. The subject's initial response is the answer you are looking for. The arrow pointing to #8 is ideal or orthophoric, pointing between 3.5 and 12.5 is the accepted norm. 1 to 8 indicates esophoria, 8 to 15 indicates exophoria. Each number represents 1.5 prism diopter of power.

NOTE: This test cannot be given to a subject with vision in only one eye, this is a binocular test only.

#### NOTES



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