Instructions and Answer Key for the Distance Randot® Stereotest

STEREO OPTICAL

The Distance Randot® Stereotest provides an easily administered quantitative test for children as young as four years of age. It is a Polaroid vectographic random dot test designed to test stereoacuity at distance fixation (3 meters). The test is composed of 1 book, containing 8 shapes (2 shapes at each of 4 disparities). The range of stereoacuity measured in this test is from 400 seconds of arc to 60 seconds of arc.

Pre-Testing

The test subject is asked to view the matching card which displays black-and-white pictures of the four shapes used in the test (circle, triangle, square, and star). The subject is asked to name each of the shapes or to point to each of the shapes as the tester names them. Testing can only proceed if the subject is able to name or match the shapes to their name.

Test Protocol

The test subject places the Stereo Optical Polarized Viewers over their eyes. At each disparity level the subject must correctly identify both of the two test shapes (A and B). The subject confirms their ability to recognize each shape by pointing to the shapes on the matching card or by naming each shape. Testing begins with the picture labeled "400A", followed by "400B". If the subject correctly matches or names both shapes at the 400 seconds of arc level, proceed to the 200 seconds of arc level. If the subject correctly matches or names both pictures at the 200 seconds of arc level, proceed to the 100 seconds of arc level. If the subject correctly matches or names both pictures at the 100 seconds of arc level, then proceed to the 60 seconds of arc level.

Scoring Interpretation

If the subject passed the pre-test but does not correctly identify both shapes at the 400 seconds level, the test is scored as "nil stereoacuity". Otherwise the smallest disparity at which the subject is able to identify both of the two shapes (A and B) is recorded as the stereoacuity. Normal subjects aged 4 to 12 years will achieve a stereoacuity of 60 seconds of arc (89% of normal children) or 100 seconds of arc (11% of normal children). Normal young adults (20 to 36 years of age) will achieve a stereoacuity of 60 seconds of arc.

Normative Data & Validation Data Available

Fu VL, Birch EE, Holmes JM. Assessment of a new Distance Randot Stereoacuity test. J AAPOS. 2006;10:419-23

Leske DA, Birch EE, Holmes JM. Real depth vs randot stereotests. Am J Ophthalmol. 2006;142:699-701

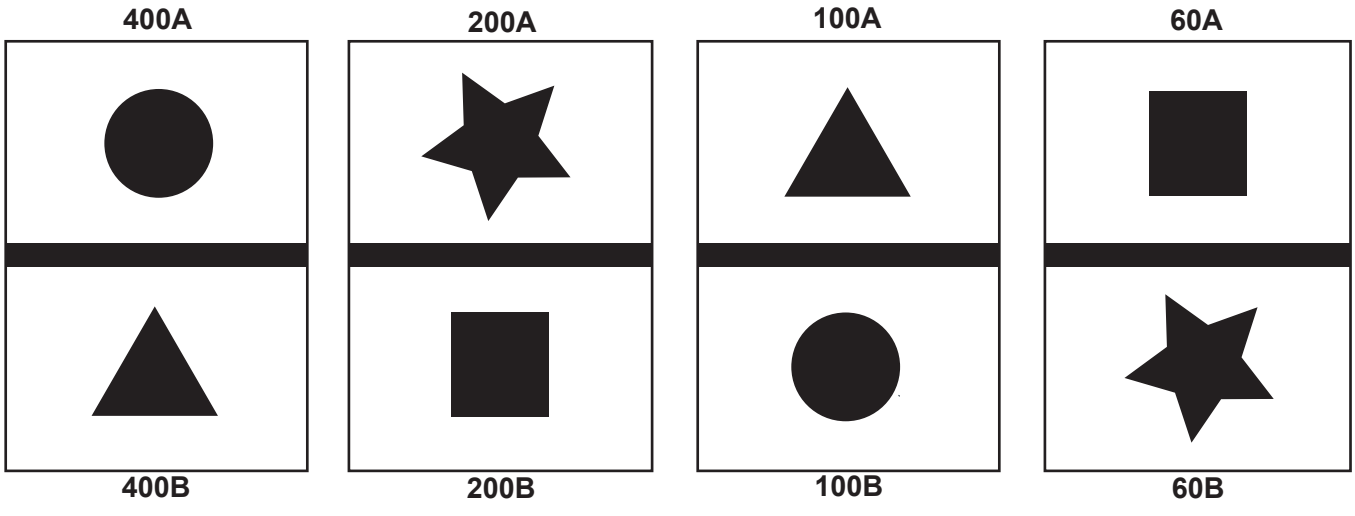
Holmes JM, Birch EE, Leske DA, Fu VL, Mohney BG. New tests of distance stereoacuity and their role in evaluating intermittent exotropia. Ophthalmology. 2007;114:1215-20

Laird PW, Hatt SR, Leske DA, Holmes JM. Stereoacuity and binocular visual acuity in prism-induced exodeviation. J AAPOS. 2007;11:362-6

Adams WE, Leske DA, Hatt SR, Mohney BG, Birch EE, Weakley DR Jr, Holmes JM. Improvement in distance stereoacuity following surgery for intermittent exotropia. J AAPOS 2008;12:141-4

Hatt SR, Mohney BG, Leske DA, Holmes JM. Variability of stereoacuity in intermittent exotropia. Am J Ophthalmol. 2008;145:556-561

Answer Key



NOTE: Please store your stereotests in a cool, dry place when not in use. High heat and humidity may cause fading.

Do not spray any liquid directly on test or 3D viewers. Clean with soft, slightly damp cloth only.

Rev. 09/14/2018