

Farnsworth-Munsell Dichotomous Test (or D-15)

This test is primarily used to distinguish between those who have normal or mildly defective colour vision from those who have moderate to severe colour deficiencies. It detects both blue-yellow and red-green defects.

Target Presentation: Arrange the loose caps randomly in front of the patient.

Patient/Examiner Position: The patient is corrected for near, if required. Tinted spectacle or contact lenses should be avoided. The examiner is positioned to observe the patient easily.

Illumination: Use an Illuminant C light source and a 40cm/16in. working distance.

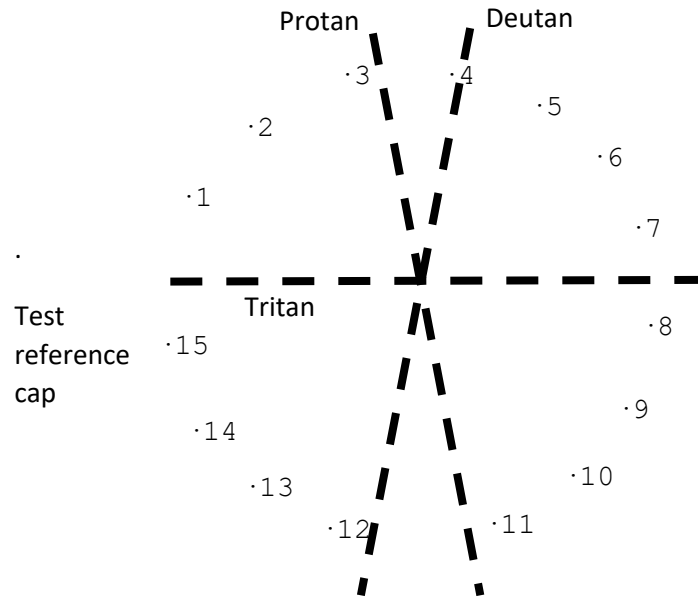
Procedure:

1. At the beginning of the test, the loose colour caps (not the pilot cap) are arranged in a random order in front of the patient.
2. The subject is instructed to use the pilot cap as a reference and place the test cap, which most closely resembles the colour of the pilot cap next to it in the box. This then becomes the reference cap for the next test cap and so on until all caps are in place.
3. Close the box, turn it over and open.
4. While there is no strict time limit for the test, patients should be encouraged to complete it in 2-3 minutes. Those who take more than two minutes may have a colour vision problem.

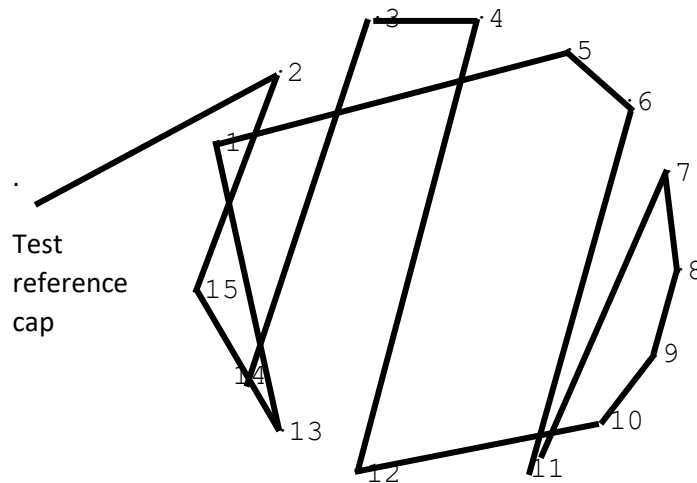
Sample Patient Instructions: "Look at the fixed cap at the end and choose one of the remaining caps which is the closest match in colour to the fixed cap." (Response) "Good. Now, which cap is the closest to the one you just chose? You may find that there is no exact match. In that case choose the one that you feel matches as closely as possible."

Recording: After closing the box and turning it over, record the order in which the caps are arranged on the score sheet (see sample on next page). Draw lines from the numbers (laid out in a circular pattern) on the score sheet according to the patient's arrangement of the caps. Should any caps be out of order repeat the test and plot your results on a second score sheet.

Sample Score Sheet:



Test subject's order: 2 15 13 1 5 6 11 7 8 9 10 12 4 3 14
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



Normal Result: Most subjects will arrange the caps in perfect order, with only one or two transpositions of adjacent caps.

Interpretation: Protans, deutans, and tritans will make errors, which will plot along parallel axis with the key on the score sheet. Totally colour blind individuals exhibit no systematic pattern. A failure consists of 2 or more errors, which cross the centre of the circle and parallel one of the three axes. Follow the above procedure and use the same score sheet for the desaturated D-15.