



Red-Green DuoChrome Test

After performing your normal monocular refraction and then binocular balance, the Red-Green DuoChrome Test is used as a final BINOCULAR sphere power check.

1. Both eyes are open.
2. Turn off the room lights to enlarge the pupil size and enhance the chromatic aberration of the eye.
3. Put up the Red-Green chart (automated or digital VA chart) or a Red-Green Filter over the chart (standard VA projector).



- a. Use any letters or target but the ideal is 20/20-20/25 or at least 1 row larger than the patient's best corrected spectacle VA.
4. Ask the patient to look only at the clarity of the letters and to ignore any brightness or darkness differences.
5. Ask the patient if the Red side or the Green side letters are sharper or clearer.
6. If the letters on the Red side are clearer, the patient is overplussed for distance.
 - a. If initially the Green side is clearer, add +0.25D steps binocularly until the Red Side is equal to the green side, then go to Step 8.
7. Add minus power in -0.25D steps binocularly until the first response that the Red and Green sides are equally clear.
8. Continue to add minus power in -0.25D steps binocularly until the first response that the Green side is clearer ("one click into the Green")
9. This is the ideal binocular spectacle refraction to enter into the NaturalVue Multifocal QuickStart Calculator.

Reasons that your initial refraction may overplus patients for distance:

- a. Short exam room (less than 14 feet from chair to the physical chart/viewing mirror, even with calibrated charts/mirrors)
- b. Refracting to 20/20 instead of 20/15
- c. Refracting habits from pushing plus with other multifocal lens designs, especially Center Near multifocal lens designs