

VFL3 - Over-Refracton

Distance (DOR) or Near (NOR) over-refractions should only be attempted when both lenses are centered and the best possible lens-to-cornea fitting relationship has been achieved. Lens position will directly impact visual acuity and the resultant over-refraction. Always maximize plus (minimize minus) at distance in order to maximize the resultant add power for near. As you increase at distance you are also increasing minus at near. Increasing minus at near will reduce the available add power and will be unacceptable to the patient. The objective is to provide the best balance of powers to satisfy both distance and near.

VFL3 must center well to achieve best-fit and visual results.

If first lenses or trial lenses are not centered over the pupil, over-refraction findings will be erroneous.

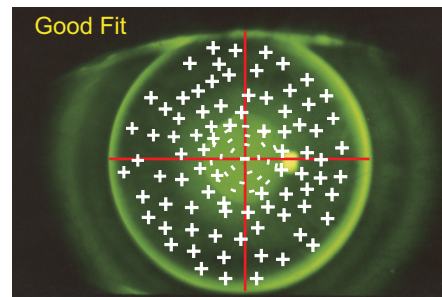
Over-Refracton Examples

Example #1: DOR -1.00, NOR Plano

A -1.00 over-refraction at distance would indicate poor centration or an underminused residual refractive error. First, check the fit and centration. If the lens is centered well, recalculate the VFL3 lens power based on the tear lens, K and Spec. Rx. If the lens power is -5.00 and your tear lens calculations indicates that it should be -5.75, you could safely increase the minus to -5.75. If the lens power is -5.75 as calculated, the lens is probably decentered. If the lens is not centered, correct the centration or fitting problem before considering any power change.

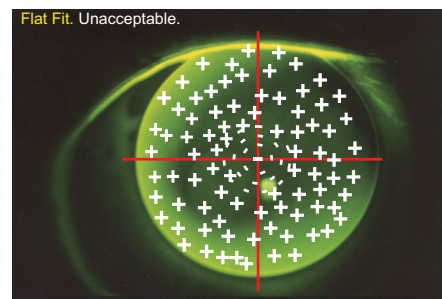
Example #2: DOR Plano, NOR +.75

In this example the distance visual acuity is good but the near is unacceptable. First, always verify the fit and centration, correct as needed. Since the patient needs +.75 at near only, HD-Optics, HD-AP or HD-CAP should be considered to increase the plus at near. In addition, consider maximizing plus at distance. Another +.25 at distance would improve the near with minimal negative impact at distance. This could be verified with a binocular distance over-refraction. If a second over-refraction is not possible, recalculate the lens power by the tear lens method to target the proper lens power.



Well centered

- Slight central pool.
- Uniform mid-peripheral alignment.
- Ideal position would be centered over the pupil with minimal displacement during blink.



Flat fitting lens decenters with movement, places the plus power range of the VFL3 over the pupil. Usually results in fluctuating or blurred distance vision.

