

# General Topographer Guide for Nocturnal



Every topographer can be used with Nocturnal night lenses. Baseline information outlined below is needed to order lenses. A subtractive map is used in Axial and Tangential to assess the treatment zone.

Order Nocturnal lenses at Scotlens.com by completing the order form in the Practitioner Area and upload the exported maps. A generated report (as shown) or a screengrap showing the data can be sent. Or email to [support@scotlens.com](mailto:support@scotlens.com) for help with assessment or the process.

## Baseline Data

Consider the treatment zone formed with orthok to be a distance centre multifocal, with an ADD the value of the baseline spec Rx. The maximum power and the position the TZ is in relation to the visual axis can affect the quality of the correction. The metrics below can indicate candidacy. Rx correction beyond -5.00 need optimum values for each metric.

### Baseline Spec Rx

Optimum correction is up to -5.00DS.

Residual Rx (rRx) can be anticipated for higher values and for the cyl component of the Baseline Rx. (eg Rx: -3.00/-0.75 x 180 would expect to correct to rRx: -0.00/-0.75 x 180, some reduction of the cyl can occur but anticipate the result you would expect with spherical soft contact lenses)

### Baseline Map Assessment

The capture area shown by colour contours should be as large as possible. Ensure you have 3 maps for each eye that are comparable all with similar metric values discussed below.

### Keratometry

Ks or Sim K. Normal values are 7.3mm to 8.3mm, flatter values can limit the amount of power correction possible. The *difference in Ks* should be similar to the spectacle cyl.

### Corneal Displacement / Contour Skew

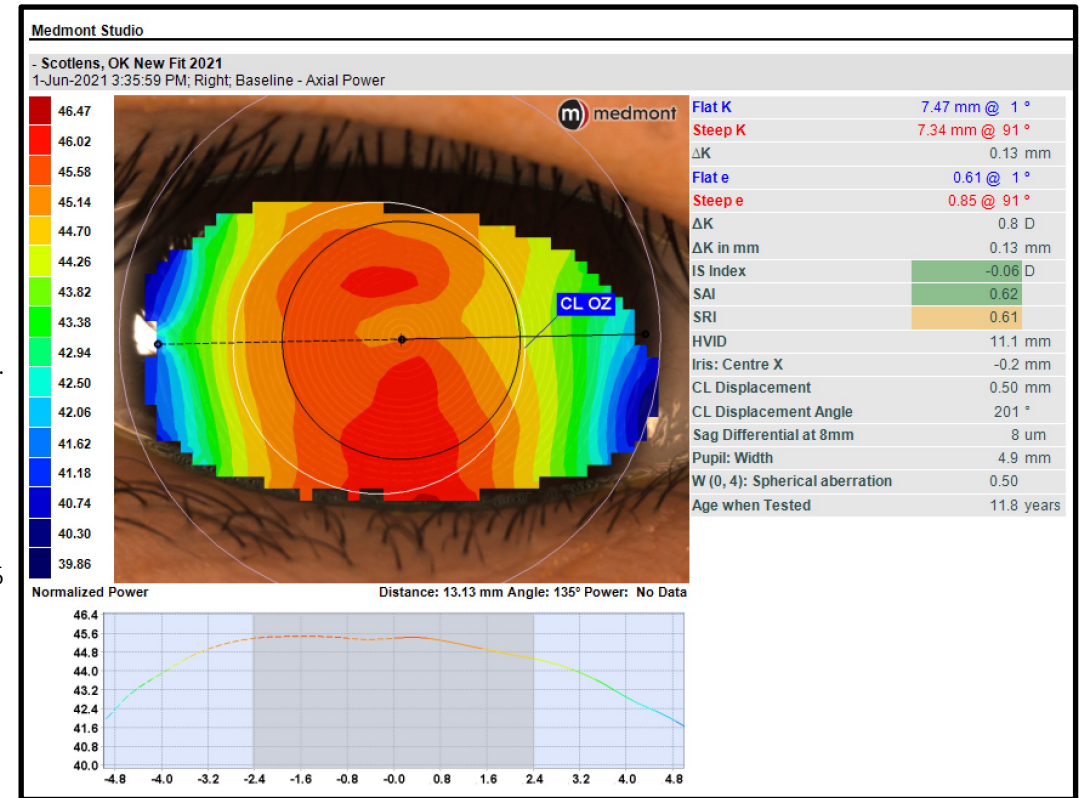
May need to be estimated based on appearance or measured with a ruler annotation. Measure where the centre of the peripheral corneal colour contours are in relation to the visual axis. For low Rx corrections up to 0.8mm will not affect VA, for higher Rx values below 0.2mm are needed.

### HVID & HVID centre from visual axis

Any value >11.4mm is suitable for an 11.0mm diameter lens suitable. Below specify a 10.5mm lens.

### Eccentricity (shown by *Asph.*)

The orthok process sphericises the cornea in the TZ. Low values can limit the maximum correction possible.



Subtractive Assessment

The TZ is analysed with a subtractive map taking the review map from the baseline map, B-A. It shows where the lens has been located in the closed eye. This should be done at every review. Assess the TZ for visual axis power change, the appearance of regularity, and the position.

Use the *subtractive* function to identify the topography result, looking at TZ location and regularity over pupil.

**TZ Power**

The power (-3.65D green arrow) is the power change on the visual axis. It should match the baseline Rx. If myopia is stable and lens parameters have not changed this value should be the same year to year. If the Rx is not corrected fully, either in the amount or the patient has glare assess the TZ for irregularity which would be irregular colour contours near the visual axis.

**TZ Position (blue arrow)**

The position of the TZ is expected to be located where the *Corneal Decentration* position indicated on the baseline map.

Up to 0.5mm of TZ decentration (TZD) is 'bullseye', 0.5mm to 0.75 will usually be well tolerated with Tx up to -3.00. -3.00 to -5.00 this may usually cause some rRx or glare.

Information on topography assessment is included in the Nocturnal Accreditation in the Practitioner Area at scotlens.com.

Adjustments to Nocturnal lenses are made in the Members login. Adjustment forms have instructions to help you identify topography outcomes.

If you need help with interpretation please use the Support form in the Members login including images of baseline maps and subtractive maps similar to shown on the right.

Your topographer supplier will be able to show you how to assess the above information.

