School of Optometry and Vision Science
Faculty of Science
University of Waterloo
Waterloo, Ontario, Canada
N2L 3G1
519-888-4567, ext. 33085
200 University Avenue West
Fax 519-746-5977
optometry@uwaterloo.ca
www.optometry.uwaterloo.ca

Appendix – Scleral Lens Clearance Assessment Survey

(Survey will be web-based.)

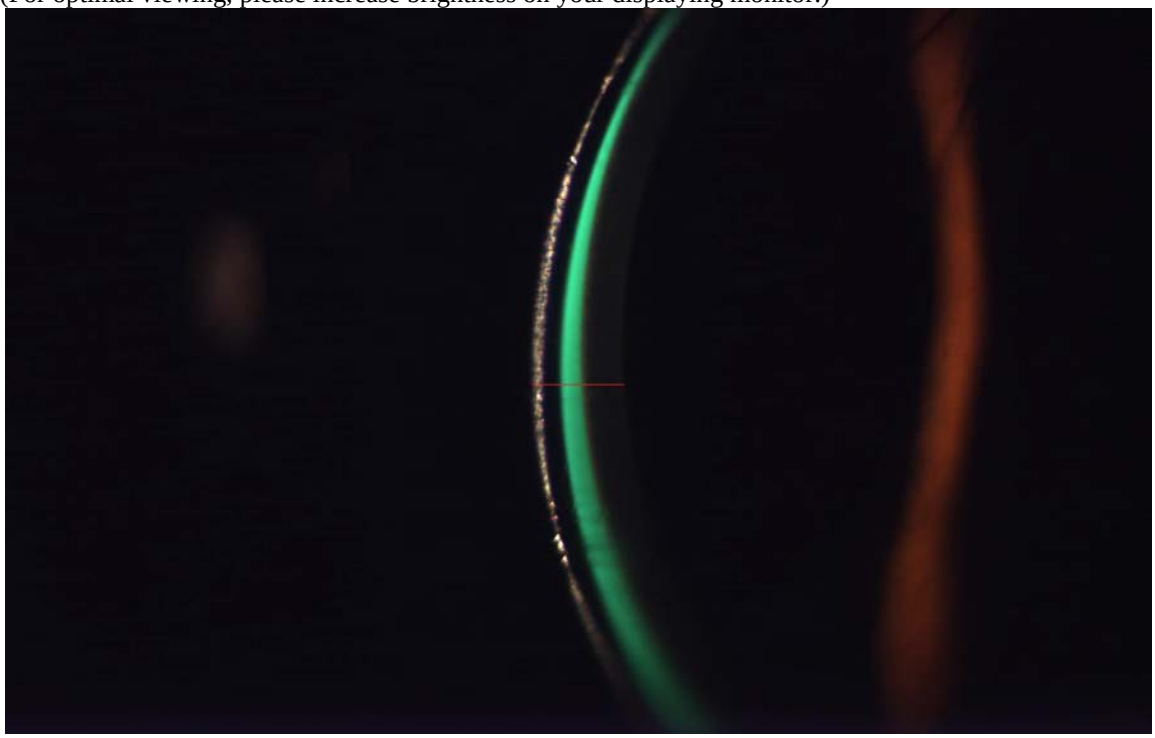
The use of scleral lenses has become the current standard of practice in managing various ocular surface diseases. The primary goal in scleral lens fitting is to ensure there is adequate clearance or tear film between the lens and the cornea. Similar to techniques in Van Herrick angle estimation, the tear film thickness can be observed with an optic section through the biomicroscope and assessed with reference to known lens thickness and/or corneal thickness.
This quick survey on Survey Monkey.[1] has four pictures imitating the view through the biomicroscope from four different scleral lens fits. Please estimate the central clearance across area indicated by red line in microns. The red line marks the total width from the front surface of the lens to the posterior cornea. Known values of the lens thickness and corneal thickness will be provided. All responses will remain anonymous. The data, with no personal identifiers, collected from this study will be maintained on a password-protected computer database in a restricted access area of the university. As well, the data will be electronically archived after completion of the study and maintained for seven years and then erased. For all participants interested in receiving a copy of their response, please provide your e-mail address on the last question of the survey. Please take note that upon the request of obtaining your response, you will no longer be de-identified to researchers, but your results will be kept confidential.
(For optimal viewing of the images, please increase brightness on your displaying monitor.)

1. How many scleral lens fitting have you done?

- ○ No experience to less than 5
- ○ 5 to 25
- ○ More than 25

2. Patient 1

(For optimal viewing, please increase brightness on your displaying monitor.)

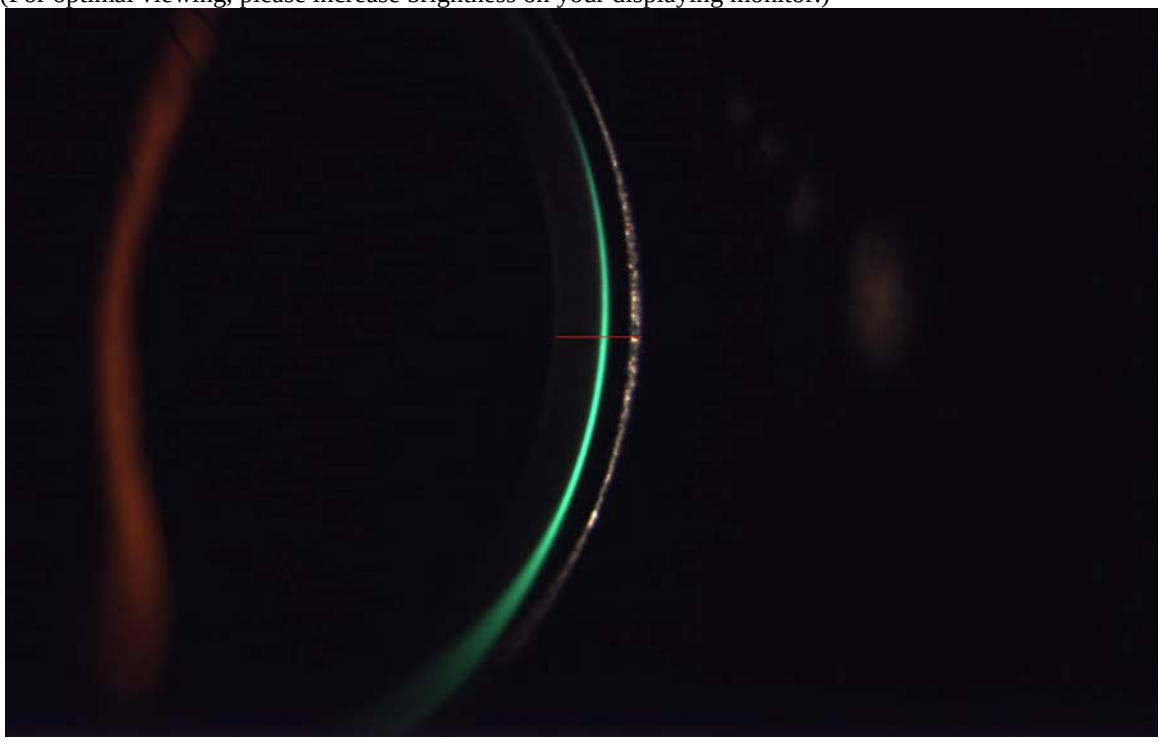


Patient 1.
For the above photograph, estimate the central clearance across the marked line.

Known lens thickness: 334um
Known corneal thickness: 513um
Enter value in microns:

3. Patient 2

(For optimal viewing, please increase brightness on your displaying monitor.)



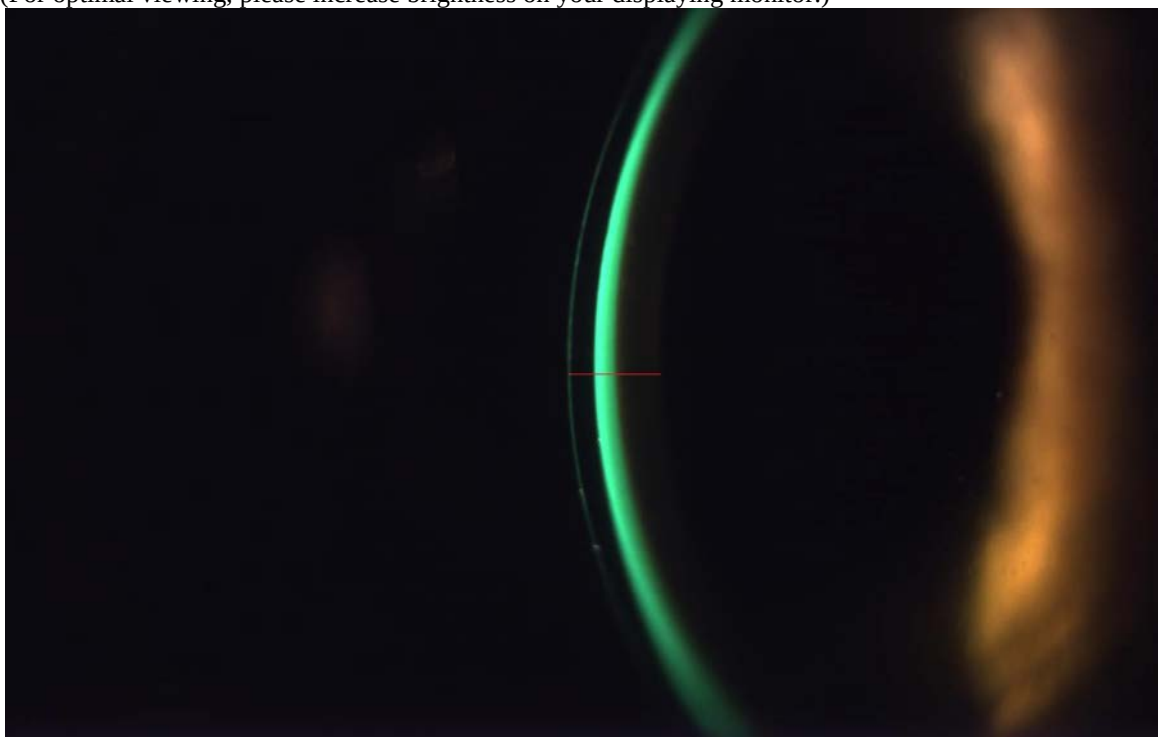
Patient 2.
For the above photograph, estimate the central clearance across the marked line.

Known lens thickness: 334um
Known corneal thickness: 504um

Enter value in microns:

4. Patient 3

(For optimal viewing, please increase brightness on your displaying monitor.)



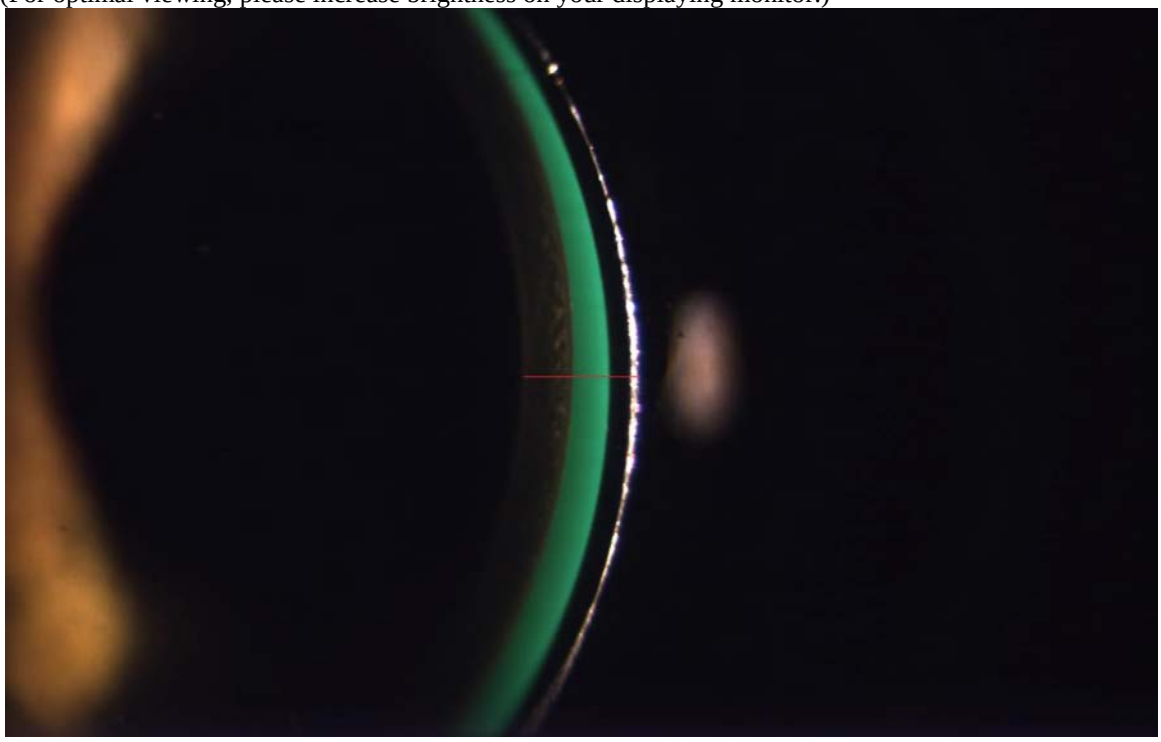
Patient 3.
For the above photograph, estimate the central clearance across the marked line.

Known lens thickness: 344um
Known corneal thickness: 527um

Enter value in microns:

5. Patient 4

(For optimal viewing, please increase brightness on your displaying monitor.)



Patient 4.
For the above photograph, estimate the central clearance across the marked line.

Known lens thickness: 334um
Known corneal thickness: 513um

Enter value in microns:

6. Thank you for your time.

If you would like to receive a copy of your results from this survey, please provide us with your e-mail address.
All contact information will remain strictly confidential.