described herein. The invention can be practiced by other than the described embodiments, which are presented for purposes of illustration and not by way of limitation, and the present invention is limited only by the claims that follow.

What is claimed is:

1. A computer-implemented method of determining refractive error, said method comprising the steps of:

receiving a first image and a second image corresponding to an axis-conjugate meridian;

removing corneal glints present in pupil regions of said first image and said second image;

applying a low-pass filter to each of said pupil regions;

rotating said first image and said second image, after applying said low-pass filter to said pupil regions in each of said images, to align a stimulus angle in said axis-conjugate meridian associated with said first image and a stimulus angle in said axis-conjugate meridian associated with said second image with a horizontal meridian;

extracting a pixel strip of data from each of said pupil regions centered on a pupil center in said first image and in said second image;

computing a ratio of pixel intensity values using said pixel strips of data extracted from said first image and from said second image;

generating a refractive error correlate measure based on said ratio of pixel intensity values; and

converting said refractive error correlate measure to identify said refractive error.

2. The method of claim **1**, wherein said axis-conjugate meridian is one of three primary axis-conjugate meridians or one of two supplemental axis-conjugate meridians.

3. The method of claim **2**, wherein said three primary axis-conjugate meridians are located at a 0° meridian, a 60° meridian and a 120° meridian.

4. The method of claim **3**, wherein said 0° meridian includes an axis angle at 0° and a corresponding conjugate angle at 180°, wherein said 60° meridian includes an axis angle at 60° and a corresponding conjugate angle at 240°, and wherein said 120° meridian includes an axis angle at 120° and a corresponding conjugate angle at 300°.

5. The method of claim **4**, wherein said axis angle at 0°, said axis angle at 60°, and said axis angle at 120° each has three decentration positions along its axis angle, and

wherein said corresponding conjugate angle at 180°, said corresponding conjugate angle at 240°, and said corresponding conjugate angle at 300° each has three decentration positions along its conjugate angle.

6. The method of claim **4**, wherein said axis angle at 0°, said axis angle at 60°, or said axis angle at 120° is said stimulus angle associated with said first image.

7. The method of claim **4**, wherein said corresponding conjugate angle at 180°, said corresponding conjugate angle at 240°, or said corresponding conjugate angle at 300° is said stimulus angle associated with said second image.

8. The method of claim **2**, wherein said two supplemental axis-conjugate meridians are located at a 36.59° meridian and a 143.41° meridian.

9. The method of claim **8**, wherein said 36.59° meridian includes an axis angle at 36.59° and a corresponding conjugate angle at 216.59°, and wherein said 143.41° meridian includes an axis angle at 143.41° and a corresponding conjugate angle at 323.41°.

10. The method of claim **9**, wherein said axis angle at 36.59° or said axis angle at 143.41° is said stimulus angle associated with said first image.

11. The method of claim **9**, wherein said corresponding conjugate angle at 216.59° or said corresponding conjugate angle at 323.41° is said stimulus angle associated with said second image.

12. A system employing computer processing logic for determining refractive error, comprising:

a processor component coupled to at least one memory component, said processor component configured to:

receive a first image and a second image corresponding to an axis-conjugate meridian;

remove corneal glints present in pupil regions of said first image and said second image;

apply a low-pass filter to each of said pupil regions;

rotate said first image and said second image, after applying said low-pass filter to said pupil regions in each of said images, to align a stimulus angle in said axis-conjugate meridian associated with said first image and a stimulus angle in said axis-conjugate meridian associated with said second image with a horizontal meridian;

extract a pixel strip of data from each of said pupil regions centered on a pupil center in said first image and in said second image;

compute a ratio of pixel intensity values using said pixel strips of data extracted from said first image and from said second image;

generate a refractive error correlate measure based on said ratio of pixel intensity values; and

convert said refractive error correlate measure to identify said refractive error.

13. A non-transitory computer-readable storage medium programmed to include instructions that, when executed by a processor, cause the processor to perform a method for determining refractive error, said method comprising the steps of:

receiving a first image and a second image corresponding to an axis-conjugate meridian;

removing corneal glints present in pupil regions of said first image and said second image;

applying a low-pass filter to each of said pupil regions;

rotating said first image and said second image, after applying said low-pass filter to said pupil regions in each of said images, to align a stimulus angle in said axis-conjugate meridian associated with said first image and a stimulus angle in said axis-conjugate meridian associated with said second image with a horizontal meridian;

extracting a pixel strip of data from each of said pupil regions centered on a pupil center in said first image and in said second image;

computing a ratio of pixel intensity values using said pixel strips of data extracted from said first image and from said second image;

generating a refractive error correlate measure based on said ratio of pixel intensity values; and

converting said refractive error correlate measure to identify said refractive error.

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