CLAIMS

1. A system for conducting a vision assessment test of an eye of a patient comprising:

   a display screen for displaying at least one moving target test profile to the patient;

   an eye tracker controlled for automatically detecting a gaze direction data of the eye of the patient when tracking the test profile(s);

   and a processor for processing the detected gaze direction data and identifying a correlation between the gaze direction data and the test profile(s) to determine how close the gaze direction data follows the test profile and to thereby obtain a vision assessment of the patient's eye;

   wherein the system comprises a user interface for enabling an operator of the system to author the test profile(s) for the patient by controlling one or more parameters of the test profile(s) prior to the vision assessment test being conducted, and wherein said test profile comprises a plurality of target images being separately displayed on the display screen in a pseudo-random pattern during the vision assessment test.

2. A system according to claim 1, wherein the test profile comprises a test profile path and a pursuit target travelling along the test profile path, the vision assessment test requiring the patient's eye to following the pursuit target, and wherein the test profile path is determined by the operator of the system.

3. A system according to claim 2, wherein the test profile path is determined by controlling the parameters comprising one or more of the following: waveform shape, waveform period, waveform frequency waveform amplitude, a-periodic or periodic waveform.

4. A system according to claim 3, wherein the waveform shapes is selectable from sinusoid, square, rectangular, triangular, saw-toothed and 2nd order waveform shapes.

5. A system according to any one of claims 2 to 4, wherein the test profile path comprises pulses and/or spikes displayed at a predetermined frequency or wavelength on the waveform.

6. A system according to claim 2, wherein the test profile path comprises a geometric shape.

7. A system according to claim 6, wherein the test profile path is selectable from an oval or rectilinear shape.

8. A system according to claim 2, wherein the test profile path is an irregular curve in shape.

9. A system according to any one of claims 2 to 7, wherein the authored test profile path is a wide pursuit path that extends across the entire threshold of the screen or field-of-vision of the patient.

10. A system according to claim 1, wherein the user interface enables the operator of the system to author the test profile by controlling parameters comprising one or more of the following: number of the test targets to be displayed, size of the test target, colour of the test target, colour of the background for the test.

11. A system according to claim 10, wherein the user interface further enables a sensitivity of the eye gaze detection being used for the test, the sensitivity being indicated on the user interface by a boundary ring encircling each of the target images.

12. A system according to any one of the preceding claims, wherein the user interface is displayed on the display screen.