STRIA.TECH

Photorefractor
Measurement of Eye Refraction

APPLICATIONS

The Photorefractor was developed by Prof. Frank Schaeffel at the University of Tübingen in Germany and is already being used by numerous labs world-wide. Based on the analysis of retinal reflection, this device automatically and conveniently measures the visual acuity of laboratory animals after one-time calibration. The main field of application of this survey method is myopia research.

ADVANTAGES

- Fast experiments due to fully automated analysis after one-time calibration
- No training of animal required
- Non-invasive in vivo and alert testing
- No experimenter biases
- For various smaller animals (e.g., guinea pigs, rats, mice)
- Comes with convenient storage/transport suitcase

SPECIFICATIONS

Photorefractor:
- Height 28 cm, Length 26 cm, Width 8 cm
- Can be tilted in steps, max. 20° tilt is possible
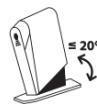
Platform:
- Height 22 cm, Length 14 / 8 cm, Width 9 / 6 cm
- consists of several levels, height can be adjusted

Equipment & Data Acquisition:
- 115 Hz data acquisition over USB 3
- Linearly light sensitive sensor for precise data
- Data is continuously recorded; given as mean ± s.d. over 10 measures each
- Only compatible with Windows