TAKAGI

Contrast Glare Tester

CGT-2000

Objective quality of vision analysis supporting
precise diagnosis and patient communication

Serving Your Vision

TAKAGI ophthalmic devices, proudly made in Japan since 1955

The CGT-2000 quantitatively evaluates real-world quality of vision by assessing contrast, glare, and four distinct testing distances.

It is suited for evaluating contrast sensitivity shifts before and after both cataract and refractive surgeries.

- **Visualises quality of vision beyond standard visual acuity tests**
- **Delivers a smooth testing workflow through an intuitive user interface**
- **Displays test results clearly using easy-to-understand graphs**

learn more

Binocular testing capability

While monocular testing provides assessment of each eye, it does not reflect how well patients actually see objects in everyday life. As the CGT-2000 can test patients with both eyes open, it provides assessment of their visual function close to real-world conditions.

Variable test distance

Test distance can now be selected from the following four settings: 30cm, 60cm, 1m, or 5m, allowing measurement of contrast sensitivity at a near, intermediate or far point. This will provide detailed assessment of patient's 'quality of vision' for more precise diagnosis.

This function is also useful in measuring contrast sensitivity in patients with multifocal intraocular lens.

Testing under various light conditions (Luminance levels of test target background)

Testing can now be done under various light conditions: day, twilight, night, or examiner specified.
This will provide assessment of patient's functional vision under conditions close to their everyday environment.

Database storage

By simply entering a patient ID and a date of birth (or age group), the patient's data will be stored in the device.

Selected sets of data are instantly converted into graphs, contributing to ease of examination and diagnosis including for pre-/post-cataract surgery comparisons and post-refractive surgery follow-up observations.

Pupil monitoring

Testing can now be performed as you monitor patient's pupils, which improves test quality, facilitating more precise diagnosis and examinations.

Customising

Test items can be customised to suit each practice or hospital. This can be done with ease as once entered, the test setting will be stored in the instrument's internal memory; there is no need to repeat this procedure.

Multiple test settings to suite a number of specific conditions and cases can be stored.

Simple touch-screen operation

The testing process, including start and end, can be performed by touching the 10.4" screen. On-screen buttons are arranged in a user-intuitive way, facilitating ease of operation. The CGT-2000 is designed to deliver stress-free testing to the examiner.

Motorised alignment

The chinrest and the interpupillary distance can be adjusted smoothly with the controls placed on the examiner's side of the instrument.

Easier paper loading

With the new "drop-in" paper loading system, all the examiner has to do is drop in a paper roll, and close the cover. No cumbersome paper feeding or threading through a slot is involved, reducing the examiner's burden.

Testing

Present test targets with lower contrast to those patients whose expected ability to distinguish contrast is high. On the other hand, present targets with higher contrast where patient's expected ability to distinguish contrast is low. Patient's responses are graphed, which provides sensitivity evaluation across the wide range of sizes and contrasts.

Testing how much contrast a patient can distinguish in objects of varying sizes (Contrast sensitivity testing)

Normal state

Reduced ability to distinguish contrast

The degree of visual disturbance from glare can be assessed by using glare lamps during contrast sensitivity testing.

Testing the degree of visual disturbance from glare

Normal state

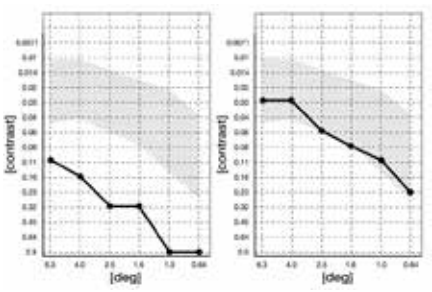
Affected by glare

Examples of Test Readings

Case 1
Pre- and Post-cataract surgery

Age group: Over 60,
Sex: Female,
Tested eye: Right,
Test distance: 5m,
Light conditions: Day,
Glare: Off

* Patient was given monofocal intraocular lens implant.

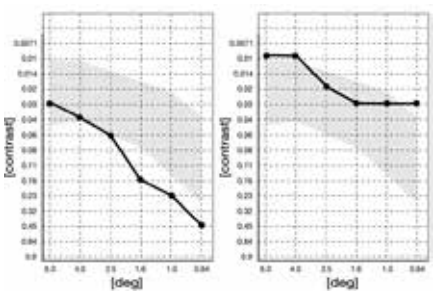


Pre-surgery　　3 days post-surgery

Case 2
Pre- and Post-cataract surgery

Age group: Over 60,
Sex: Female,
Tested eye: Right,
Test distance: 5m,
Light conditions: Day,
Glare: Off

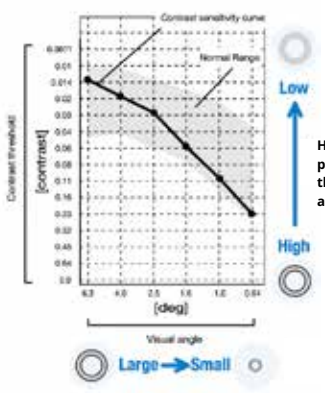
* Patient was given monofocal intraocular lens implant.



Pre-surgery　　15 days post-surgery

Interpretation of Readings

This sensitivity curve was created for demonstration purposes only, and not based on actual test results.



Higher the position, lower the contrast, and vice versa

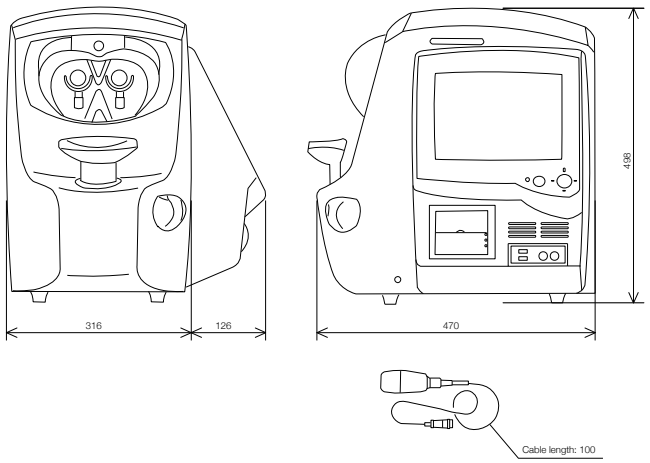
The size of the test target is largest on the far left, and smallest on the far right

Specifications

Model name	CGT-2000 Contrast Glare Tester
Test distance	30 cm, 60 cm, 1 m, 5 m
Light conditions (Luminance of test target background)	Day, Twilight, Night, or Examiner Specified
Glare	Three settings: Low (L), Medium (M), and High (H)
Structure of test target	Multiple structure with dual concentric circles
Visual angle of test target	6.3, 4, 2.5, 1.6, 1, 0.64 degrees
Contrast value of test target	14 levels between 0.0071 and 0.64
Presentation duration of test target	0.2, 0.4, 0.8, 1.6 seconds
Presentation interval of test target	1, 2, 3 seconds
Power supply	AC 100-230 V, 50/60 Hz
Power consumption	85 VA
Fuse	5A
External dimensions	442 (W) × 470 (D) × 498 (H) mm
Weight	18 kg

Dimensions

Dimensions (mm)



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To ensure safe and correct handling please read the user manual before using.

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