

Detect vision loss from ocular diseases
Humphrey FDT Perimeter

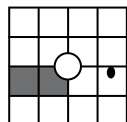
Simple, Reliable, Proven



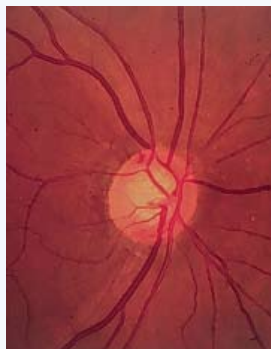
ocular diseases without specialized training

Normal Tension Glaucoma

Pattern Deviation



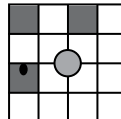
MD: -3.41
PSD: 6.06 P <5%
Fixation Errs: 0/6
False Pos Errs: 0/6
False Neg Errs: 0/3



Diabetic Retinopathy

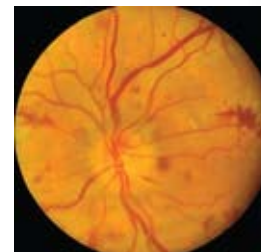
Screening C-20-1 LEFT EYE

Deviation



Fixation Errs: 0/3
False Pos Errs: 0/3

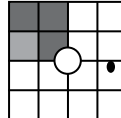
□ Within Normal Limits
■ Mild Relative Loss
■ Moderate Relative Loss
■ Severe Loss



Branch Vein Occlusion

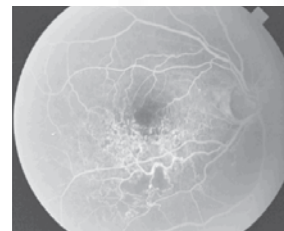
Screening C-20-1 RIGHT EYE

Deviation



Fixation Errs: 0/3
False Pos Errs: 0/3

□ Within Normal Limits
■ Mild Relative Loss
■ Moderate Relative Loss
■ Severe Loss



Humphrey FDT is produced by the leader in diagnostic equipment for eye disease – Carl Zeiss Meditec

The Humphrey FDT® is from Carl Zeiss Meditec, the world leader in diagnostic test equipment for ophthalmology. Carl Zeiss Meditec is also the developer and distributor of the Humphrey® Field Analyzer, the recognized gold standard in visual field testing. Humphrey Field Analyzers are used by more eye care providers than any other automated diagnostic perimeter today.

Carl Zeiss Meditec, one of the world's leading medical technology companies, offers integrated solutions for treating the four main eye diseases: vision defects (refraction), cataracts, glaucoma and retinal disorders. Diagnostic products range from slit lamps and fundus cameras to standard-setting diagnostic systems such as the Humphrey Field Analyzer, the Cirrus™ HD-OCT and the IOLMaster®. Carl Zeiss Meditec also produces surgical microscopes and innovative treatment systems for refractive laser surgery.

FDT can help your staff detect vision loss in

Clinically Validated

Multiple studies¹⁻¹⁵ have shown that the Humphrey FDT detects visual field loss due to a variety of ocular diseases, including glaucoma. Thus FDT is ideal for clinics desiring to identify patients in need of ophthalmological referral.

- FDT is clinically validated in more than 170 peer-reviewed publications.

Proven Performance on Virtually all Patients

Studies have found that virtually all patients can perform this fast and simple test with reliable results:

- Beijing Eye Study: 98% patient success
- Tajimi Population Screening Study: 98.7% patient success.



The Humphrey FDT can detect visual field loss associated with a variety of ocular diseases

Cause of visual field loss	Number of subjects	Percentage
Cataract	116	2.6
Glaucoma	110	2.5
Degenerative and high myopia	86	2.0
Non-glaucomatous optic nerve disease	30	0.7
Diabetic retinopathy	13	0.3
Corneal opacity	12	0.3
Retinal vein occlusion	10	0.2
Macular degeneration	6	0.1
Vitreous opacity	3	0.07
Epiretinal membrane	3	0.07
Stroke	2	0.05
Retinal detachment	2	0.05
Other	62	1.4
Total Case Detection	455	10.5%

FDT case detection in 4350 subjects Beijing Eye Study (excerpted data)¹⁵



ocular diseases without specialized training

Use the FDT Anywhere:

- General hospitals
- Polyclinics
- Community clinics
- Industrial health check clinics
- Optical shops

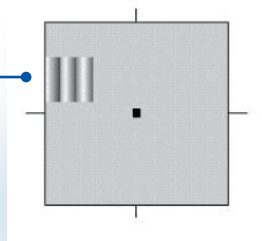
Patients with a positive FDT result can be referred for specialized ophthalmic examination. Interpretation criteria may be adjusted for local conditions.

Easy to Operate and Interpret

The FDT is optimized for use in non-ophthalmological settings and may be operated by healthcare workers having little or no specialty training in ophthalmology.

- Simplified three touch operation
- Patients may be tested using their own glasses
- Short test: ~40 seconds per eye
- Small footprint
- Simplified interpretation of results

Large, easy-to-see stimuli provide patients with a simple and enjoyable task



FDT is easy on patients

- Comfortable headrest
- Large, easily seen test stimuli
- Ergonomic response button
- Short testing time

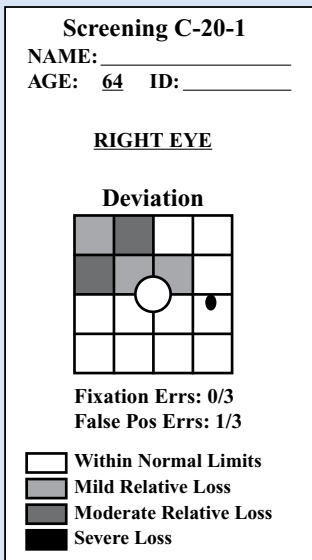
The FDT is a small, automated peripheral vision testing device. The patient simply presses a response button whenever he/she sees a test stimulus. These simple operating requirements, coupled with the instrument's well-documented clinical performance, make it a natural choice to detect the effects of eye diseases on visual function.



FDT is ideal for screening

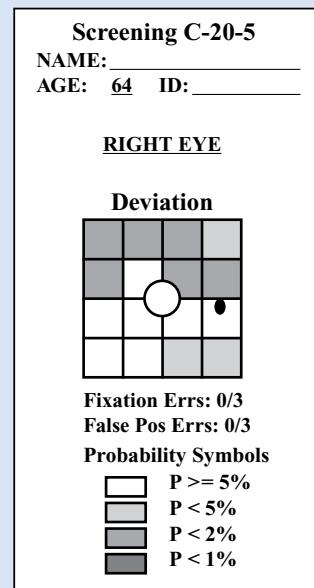
- Highly sensitive in detecting visual field loss associated with a range of eye diseases
- Can be placed almost anywhere, including non-ophthalmic clinical settings
- Technician operated, with minimal training
- Fast and easy testing for patients in 40 seconds per eye
- Simple to understand test

The C-20-1 test emphasizes high specificity and is therefore best designed for general screening of large populations. The C-20-5 test emphasizes high sensitivity to optimize detection of early, subtle pathologic sensitivity loss, and is best designed for screening ophthalmic patients with risk factors or symptoms associated with eye diseases.



Shaded locations in the FDT printout indicate areas of visual field sensitivity that are outside normal limits.

- The results illustrated above are consistent with a diagnosis of glaucoma. The darkest symbols indicate areas of the patient's peripheral vision that were lower than that found in 99.5% of normal subjects.



Test reliability is automatically assessed by presenting fixation loss and false positive trials.

- The printout above indicates that the patient's gaze was quite steady during the test (Fixation Errs: 0/3), and that the patient reliably pressed the response button when a stimulus actually was seen. (False Pos Errs: 0/3.)

Humphrey FDT Perimeter

Technical Specifications	
Test specifications	Maximum temporal range – 30 degrees
	Stimulus duration – 300 ms
	Visual field testing distance – infinity
	Background illumination – 100 cd/m ¹⁰
Threshold test library	N-30
	C-20
Screening test library	C-20
	N-30
Screening test modes	Age corrected



*Simple test that
an inexperienced
test-taker can
perform easily
and comfortably.*

User Features	
Fixation control	Heijl/Krakau blind spot monitor
Operator interface	LCD
Stimulus	Frequency doubling
General testing features	Stimulus sizes – 10 degrees
Printer	Thermal printer
Data storage, retrieval and analysis	PC-based – ViewFinder option
Dimensions	Height: 17" (43 cm)
	Width: 10" (25 cm)
	Depth: 19" (48 cm)
	Weight: 19 lbs (8.6 kg)
Electrical requirements	100-120 V, 50/60 Hz
	230 V, 50/60 Hz
Meets UL, CSA, CE standards	Yes

Selected References

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SAP# 000000-1781-970 FDT.2415 0909
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