Frequency Doubling Technology Perimetry

The test field is about a 20-degree area comprised of 17-19 sectors to be measured. The patient responds to the test by pressing a button within one second of seeing the stimulus. The stimulus' contrast is modified for each of the areas depending upon the age of the patient. The stimuli are presented at random throughout the test field. The entire field may tend to fade out on patients due to such steady fixation, and the patient should be instructed to blink (right after a stimulus presentation) to prevent this fade out (Ganzfeld) effect.

There are two screening tests, the C-20-1, which is more specific (lowest level of misdiagnosis) and the C-20-5, which is more sensitive (higher rate of detection). There is also a test with two more targets called the N-30 (-1 or -5). This test may require a re-fixation procedure, depending on which model FDT instrument is used. The results are displayed as a grey scale.

The threshold tests measure the contrast sensitivity needed to detect the stimulus and compare it to age-calculated norms. These are displayed on a grey scale, which shows the probability levels for that result. They may also appear as a plot similar to a Humphrey Field test with Total Deviations Plots showing losses (from say cataracts) and Pattern Deviation Plots showing more localized areas of loss.

Like all tests, reliability is important. The FDT utilizes fixation errors as measured by the blind spot testing, false positives to rule out patients who anticipate the stimulus, and false negatives for patients who just can't make up their minds (even the ones they see). These reliability tests should be less than 33 percent. There is also a video monitor in some models. Certain problem areas will result from poor set-up (alignment at the test), droopy lids, cataracts, nervous or trigger-happy patients, and amblyopic eyes.

NAME:
ID: **9105451817**

BOTH
DOB: **04–26–1942 [64]**

N–30–5 FDT Screening

DATE: **06–21–2006 11:28 AM**

TEST SPEED: NORMAL

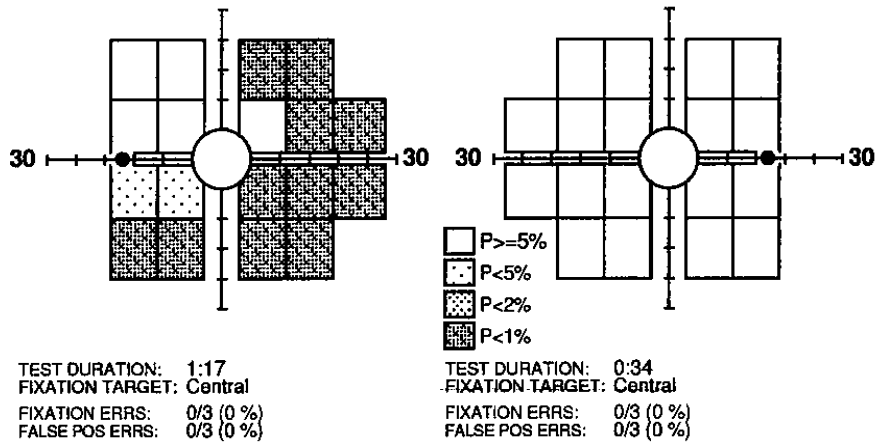**LEFT EYE**   **RIGHT EYE**

PUPIL DIAMETER:
VISUAL ACUITY:
RX: NONE

PUPIL DIAMETER:
VISUAL ACUITY:
RX: NONE

TOTAL DEVIATION

	P>=5%
	P<5%
	P<2%
	P<1%

TEST DURATION: 1:17
FIXATION TARGET: Central
FIXATION ERRS: 0/3 (0 %)
FALSE POS ERRS: 0/3 (0 %)

TEST DURATION: 0:34
FIXATION TARGET: Central
FIXATION ERRS: 0/3 (0 %)
FALSE POS ERRS: 0/3 (0 %)

FDT screening fields' results for a patient with normal fields on the right and abnormal results on the left. Note loss nasally in an arcuate shape – this is typical of glaucoma.