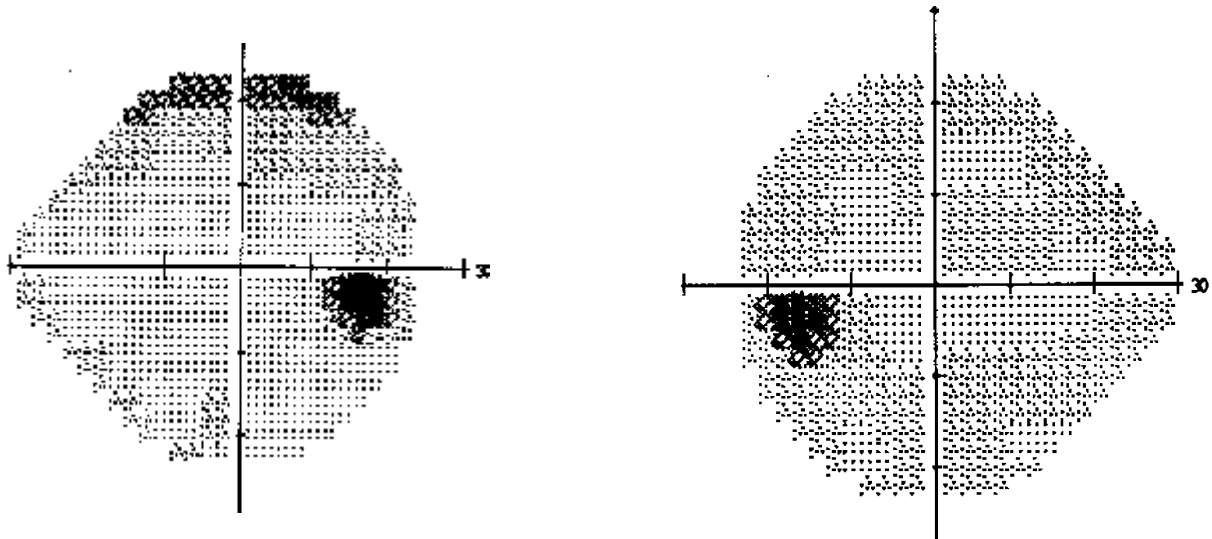


## Visual Field testing – computerised Humphrey visual fields

This is a test often done by a nurse or Technician to assess how much you can see around and about. Certain diseases cause one to lose one's peripheral or central field. This test is very useful for the doctor to help manage various eye conditions.

The most common reason for doing a field test is for glaucoma a disease that starts with losing peripheral vision. Patients with glaucoma will have their visual fields undertaken regularly to assess if there is any change in the disease.



This is an example of a computerised Humphrey visual fields which is normal in the left eye (on the right of the page, but shows typical scotoma (field defect) of chronic open angle glaucoma in the right eye. This patient has long standing glaucoma on treatment and is having field tests done once per year.

Here a patient is undergoing a computerised Humphrey visual fields. One eye is covered while the Patient wears their reading glasses.

The machine randomly flashes a spot of light in an evenly illuminated bowl that the patient looks in to. These spots vary in brightness, some of them are bright some dim and some so dim no one would normally see them. Using a buzzer which the patient presses every time they see a flash of light to indicate they have seen this. The computer in the field machine records this and calculates the patient's fields.



The test takes anything from 2 minutes to over 5 minutes depending on which field test is selected.

Easterman Field test is a special binocular test used for Driving level standard. This is very much a pass or fail field test, the spots are very bright. This is used by the DVLA to determine if a patient has enough fields to drive. Currently one needs 120 degrees of horizontal field and 20 degrees above and below the midline. This test is usually

only done on the request of the DVLA and most usually by Optometrist in the community rather than hospitals.

These machines have large databases of normal peoples vision so is able to adjust for age. An age matched print out is then printed at the end to indicate how much the patient can see. Software on the machine can also compare the patients fields with previous ones and calculate if there is any deterioration.

There are various field machines used, Optometrists/Opticians will often using quick screening machines but the machine used almost universally in hospitals is the computerised Humphrey visual field machine. These are very useful for screening patients for referral to the hospital service.

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