

Ford Chart: Stages in Compromised Vision

- 10: no sense of vision
- 9: awareness of light without vision
- 8: seeing the window, though without further detail
- 7: discerning glazing bars though identifying nothing
- 6: awareness of buildings across the street
- 5: identifying shape of building and presence of nearby vehicle
- 4: outline of building and nature of vehicle perceived
- 3: tiles on the roof can be resolved, though not bricks (equivalent to 20/200 or 6/60 vision)
- 2: bricks can be seen, number-plate on vehicle identified (equivalent to 20/100 or 6/30 vision)
- 1: all details clear, number-plates on vehicles in the street can be read (equivalent to 20/20 or 6/6 vision)

By polite questioning, the clinician can gauge severely compromised vision (e.g. "Can you see the building over the road? How many windows has it? Do you perceive the tiles on the roof, or the bricks?") and patients suffering unilateral impairment of sight can use the chart to note changes in their vision at home, caused by conditions such as corneal oedema due to Fuchs' dystrophy or endotheliitis, etc. This does not offer a definitively quantitative assessment, but allows the optometrist (or the compliant patient) to monitor relative changes over a period of time. The chart is reproduced here as a service to optometrists. Enquiries to: brianjford@cardiff.ac.uk

The Ford Environmental Chart

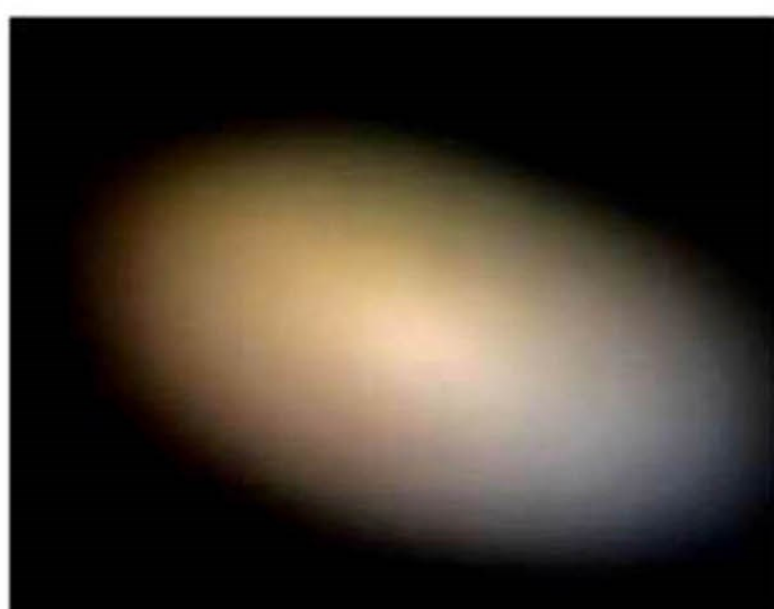
As per release dated 21 May 2023, a revolutionary new eye chart has been announced by British scientist Professor Brian J Ford. It allows assessment of severely compromised vision, beyond the scope of the traditional Snellen eyechart. Rather than relying on a mathematically calibrated scale, it utilises familiar objects in the clinical environment. Optometrists assessing patients with unilateral loss of acuity will find this invaluable; it can also be used to gauge stages of near-blindness by asking patients simply to look out of the window. This chart can be given to patients so they may record changes in optical performance when only one eye is affected. It categorises vision in ten stages, with a patient seated facing the window across the consulting room (about 3 metres from the window):

MONOCULAR VISION ASSESSMENT: ENVIRONMENTAL CHART

Brian J Ford

The progressive deterioration of vision in one eye resulting from conditions such as cataract deposition, or to corneal changes due to senile endothelial dystrophy, cannot currently be quantified. An objective means of assessment would permit the documentation of changes over time. This chart represents eight stages of deterioration, from the mere detection of the position of an unresolved window to a fully resolved view of the typical, familiar built environment. In each case an approximate intimation is provided of the degree of resolution. The clinical optmetrist could routinely apply this test during routine consultation though it could also be used by a patient at home to record changes in vision over time (for instance, during osmotic dehydration of the tumescent cornea).

Devised by Brian J Ford © 2023.



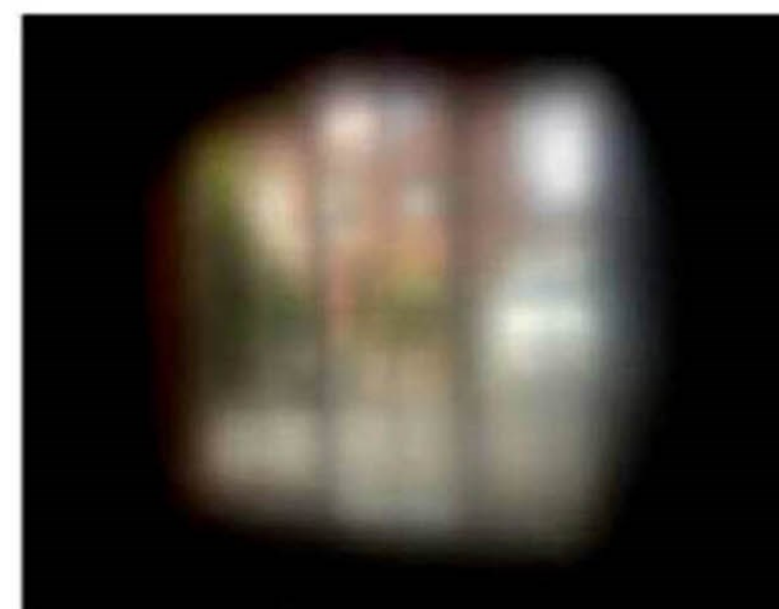
8

Detects window direction only.
Resolution at 3 m = 1 m (100 cm).
Resolution at 15 m = 5 m (500 cm).



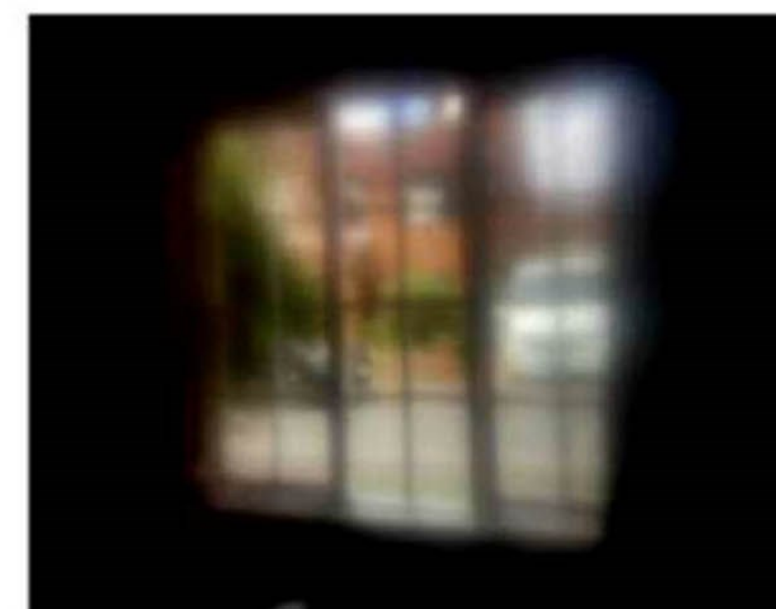
7

Window with glazing bars just discernible.
Resolution at 3 m = 0.5 m (500 cm).
Resolution at 15 m = 2.5 m (250 cm).



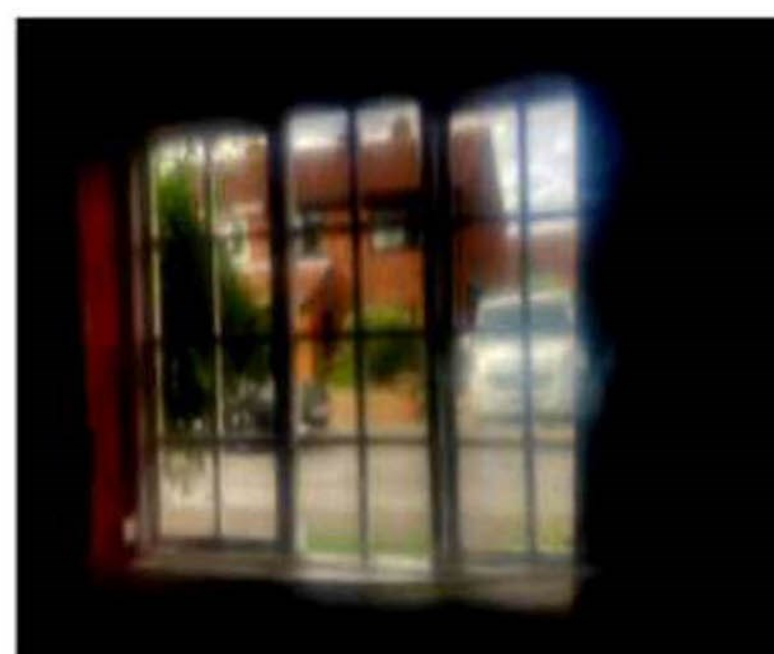
6

Glazing bars and building outline seen.
Resolution at 3 m = 0.25 m (25 cm).
Resolution at 15 m = 1.25 m (125 cm).



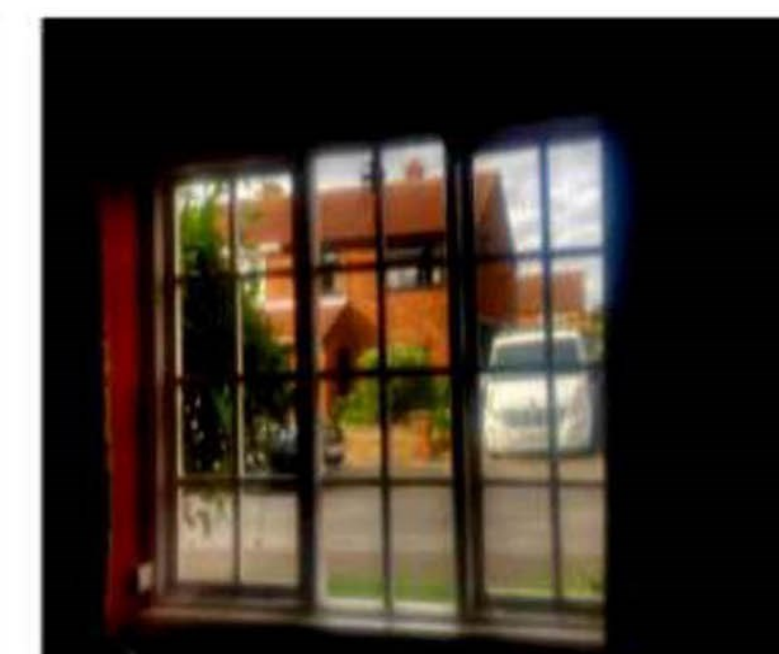
5

Opposite building, vehicle visualised.
Resolution at 3 m = 0.1 m (10 cm).
Resolution at 15 m = 0.5 m (50 cm).



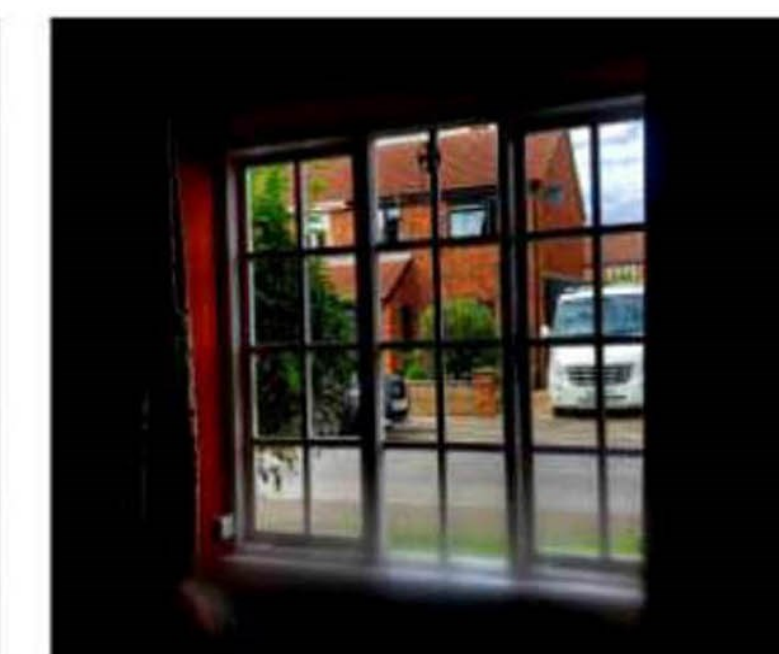
4

Windows, chimneys, and van discerned.
Resolution at 3 m = 3 cm.
Resolution at 15 m = 10 cm.



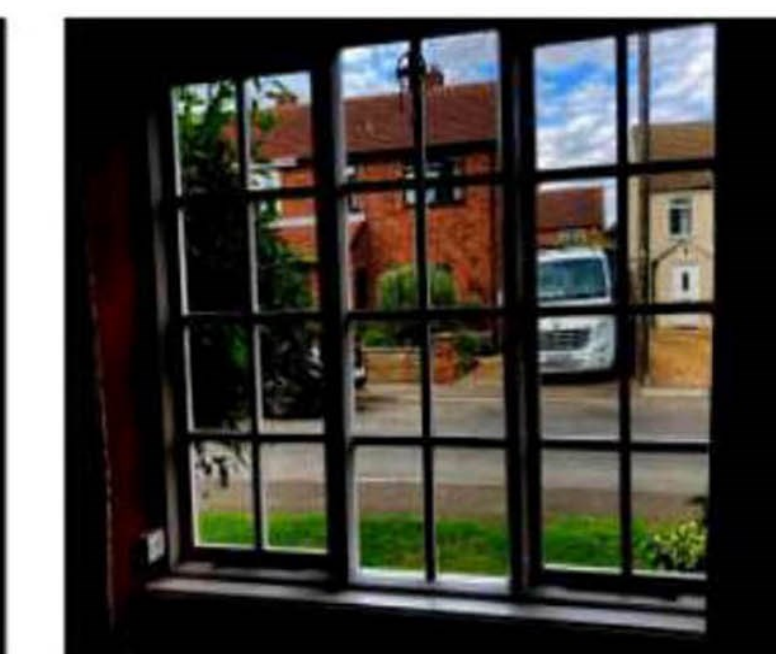
3

Tiles on roof resolved, though not bricks.
Resolution at 3 m = 2 cm.
Resolution at 15 m ≈ 5 cm.



2

Bricks, trellis and numberplate discerned.
Resolution at 3 m = 0.2 cm.
Resolution at 15 m = 0.5 cm.



1

Numberplate can be read BJ62 ZPY.
Resolution at 3 m = 0.1 cm.
Resolution at 15 m = 0.25 cm.

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