

Guide to views from steep angles

The purpose of a CCTV camera is often to identify people. The UK Home Office Scientific Development Branch guidance is that a 1.7m (5'7") tall person fills the screen top to bottom in PAL pictures (576x720 pixels) like the main images here.

Illustrations of "100% = identification" often show the subject from at or near eye-level. This is misleading because it is not a realistic point of view.

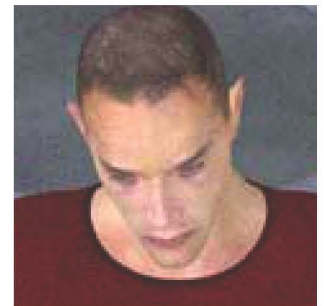
The x4 magnification shows facial detail, including camera noise and typical jpeg/mpeg compression effects & degradation.



From 40 degrees above

Keeping the same distance, the view is 'foreshortened' and a longer lens will be needed to view the man at 100%.

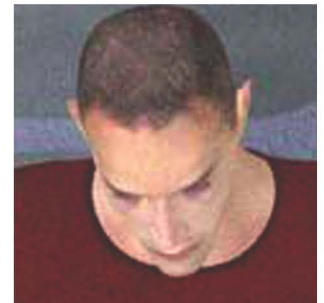
The task of facial identification appears quite literally less straightforward.



From 50 degrees above

The task of facial identification is more difficult owing to the steeper view. Poor lighting at night or heavy shadows could make this even harder.

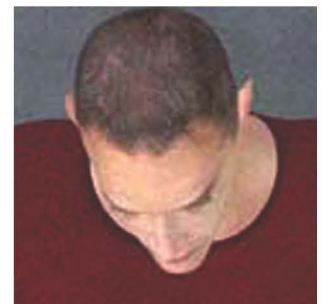
At the same range as above, a longer lens will be needed to achieve 100%.



From 60 degrees above

The task of facial identification is much more difficult owing to the steeper view. Good lighting at night might help.

A much longer lens than calculated 'from eye-level' will be needed to achieve 100%.



From 70 degrees above

Facial identification might be impossible, relying now on more difficult features.

The final question: what is the steepest angle acceptable in my CCTV design, and does the end-user understand and agree?

