

#### 4 DISCUSSION

The mean diameter of the smallest artificial point detected in the eyesight test measures 19.3 arcsec. This is 4.3 arcsec more than the mean umbral diameter of the smallest sunspot detected in the network survey. We think that this difference is real (in spite of the statistical error of 2.3 arcsec), because during the eyesight test no observer could detect points smaller than 18 arcsec. In addition, our result agrees remarkably well with the threshold-size of 18 arcsec given by Siedentopf (1950) for the same background surface brightness.