

viewer # 725

~~3071~~ 6699

Resolution high contrast target full light
all readings are at a single focus setting
and are average of the horizontal & vertical target.
30X Resolution

center	203 / mm
Lower center	203 / mm
Upper center	128 / mm
center right	181 / mm
Lower right	144 / mm
Upper right	64 / mm
Upper left	64 / mm
center left	144 / mm
Lower left	161 / mm

15X

center	57 / mm
Lower center	181 / mm
Upper center	181 / mm
Upper right	16 / mm
center right	36 / mm
Lower right	23 / mm
center left	40 / mm
Lower left	18 / mm
Upper left	14 / mm

2

5X

center 23 / mm

lower center 18 / mm

upper center 28 / mm

upper right 40 / mm

center right 25 / mm

lower right 18 / mm

lower left 18 / mm

center left 23 / mm

upper left 25 / mm

(5)

All lenses have color fringes to a greater or lesser degree — although not noticeable to the naked eye, it does indicate chromatic aberration in the lenses.

Light does not adequately cover field. — This could be caused either by improper condensers or condensers out of adjustment (would require optical bench to align). There is no lamp position that is best for all lenses probably due to ^{the} same cause.

15x has double image when not in focus — indicating misalignment of optics.

Focus does not cover field of screen — The lens does not have the required covering power.

(4)

None of the images center properly when changing from 30x to 15x to 5x -

This is due to miss alignment of the objective lenses, there is no provision to adjust the lenses in the Y position. An eccentric ring or a couple of positioning screws on the lens mounting could readily correct this.

MIRRORS - The universal linkage in the no. 1 mirror is so poor that ^{random} movement of the mirror can displace the image on the screen by 1/4 inch. There is no spring loading to hold this lost motion to one direction.

No. 3 mirror is mounted to the frame of the viewing cabinet, this does not adequately support this mirror as twisting in the frame structure can displace the

5

No. 3 mirror is out of adjustment
does not cover upper corners of screen

Lenses - all of the lenses have
considerable astigmatism however,
the specific (or relative) amounts
is difficult to determine because
of color fringing,



STAT