

PRACTICAL APPLICATIONS OF TEST TARGETS



Both of these images have been printed from the same negative, but using two different enlarging lenses, one cheap, the other expensive. Can you tell which lens was used on each?





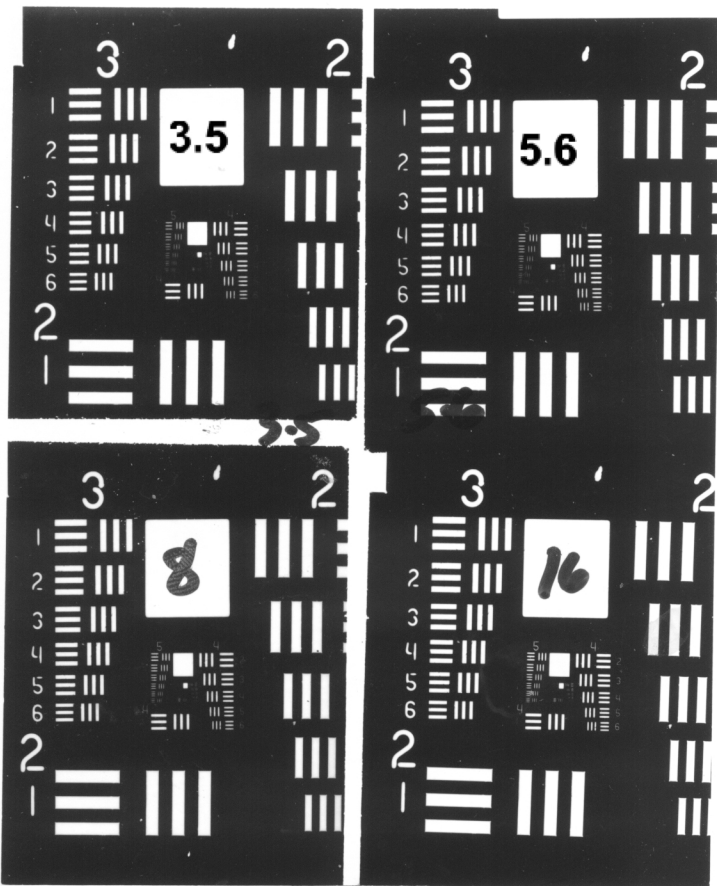
\$59.95 in 1975



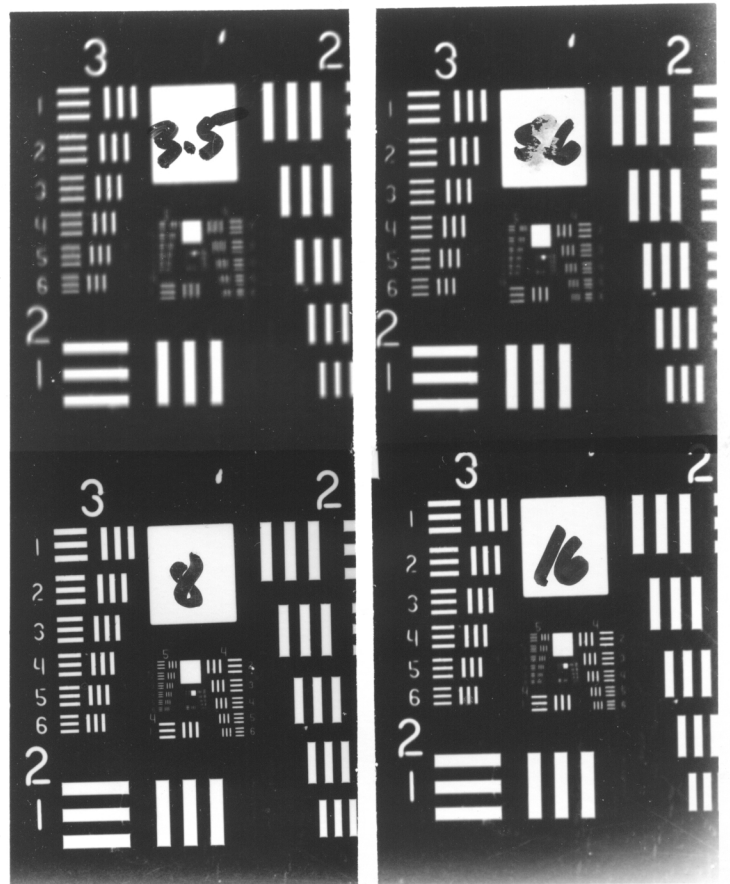
\$5.96 in 1969

Here are the two lenses, same focal length and f/stop, different prices. The top picture on the previous page was enlarged with the less expensive lens on the right, the lower with the lens on the left.

Below are enlargements of the USAF Target, projected with the same lenses. The magnification of the photographs is 15X. There are 4 exposures running the gamut of possible f/stops of each lens. Exposure time was adjusted for each opening. The superior resolving power of the Omegaron is obvious, accounting for the higher contrast in the hair in its print. Even stopping the Voss lens down doesn't really eliminate the spherical aberration



EXPENSIVE



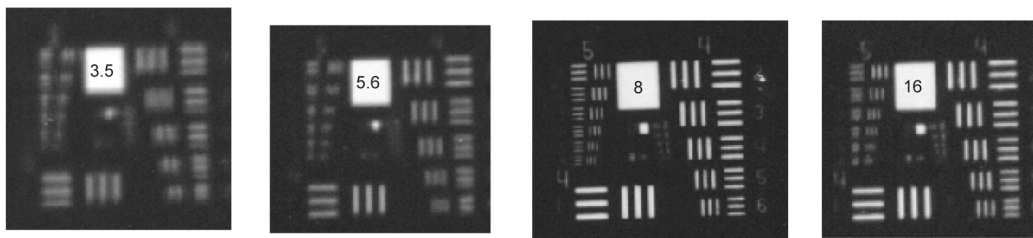
CHEAP

TECHNICAL NOTES ON THE PRODUCTION OF THE PRINTS

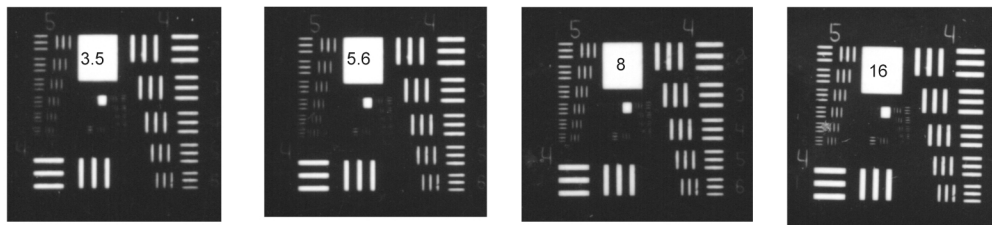
The enlarger was in the uppermost position for maximum magnification, approximately 14X. A 4" by 5" sheet of Agfa Brovira Speed RC Paper developed for normal contrast was placed in the focus, and exposure tests were run. Even when both of the test lenses were stopped to f/8, the Rodenstock Omegaron needed 1/3 the exposure of the Voss.

Once decent exposures were established, a mask which allowed four cropped quadrants to be exposed on the single piece of paper yielded images recorded with the largest and smallest f/stops plus those two and three clicks from the largest opening, namely 3.5, 5.6, 8, and 16. Those numbers are in the box of the target.

The pictures on the previous page were scanned and printed life size at 600 dpi, showing Group 2 on down of the target. Group 4 and below were scanned at 1200 and printed at 600 dpi, so they are twice life size in the Figure below..



Voss 50 mm f/3.5



Rodenstock Omegaron 50 mm f/3.5