

U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
WASHINGTON 25, D.C.

NATIONAL BUREAU OF STANDARDS

REPORT OF TEST

on
One Photographic Objective

Submitted by
Xerox Corporation
Rochester, New York 14603

Transmittance on Axis

Transmittance on axis	90.7%
Geometric f-number	f/4.60
T-stop	T/4.83

The probable errors of the transmittance, geometric f-number, and T/stop do not exceed 15%. These measurements have been made in accordance with MIL-STD-150A, Section 3.2, Aperture and Related Quantities.

Illumination in the Image Plane

<u>Angular Separation from Axis</u>	<u>Relative Illumination</u>
0°	1.00
5°	0.98
10°	.92
15°	.84
20°	.69
25°	.50
30°	.30

The probable error of each relative illumination value does not exceed ± 0.05 . These measurements have been made in accordance with ASA Standard No. PH 3.22-1958, Distribution of Illumination over the Field of Photographic Objective or Projection Lens, section 3. Direct Measurement of Illumination Distribution. These values were determined at 1:1.

This report applies to the Bausch and Lomb lens marked J.D., nominal focal length 9 1/2 inches, maximum aperture f/4.5. It was measured at maximum aperture using a W. D. Welch "Densichron".

For the Director,

Francis S. Washer, Chief
Refractometry Section
Metrology Division

NBS Test No. 181504
August 4, 1964
JPT:amr:ma