S. Department of Commerce Philip M.-Klutznick Secretary National Bureau of Standards Ernest Ambler, Director

National Bureau of Standards

Certificate

Standard Reference Material 2061

Reflection Step Tablet

I.D. No.			 	
Date Pack	caged:	 	 	

This Standard Reference Material is intended for use in the calibration of optical densitometers and similar equipment used in the photographic and graphic arts fields. SRM 2061 is certified for optical densities from 0 to 2. The certified values for the optical densities are recorded on the tablet envelope.

The densities of the steps of this table were compared with those of a National Bureau of Standards standard step tablet that has been calibrated by methods that conform to conditions specified for American National Standard Annular $45^{\circ}:0^{\circ}$ Absolute Visual Reflection Density, Type 3000 K, D_{Ra} (g_a ; 3000 K: \leq 5°;V), in "ANSI PH2.17-1977, American National Standard Annular $45^{\circ}:0^{\circ}$ (or $0^{\circ}:45^{\circ}$) Optical Reflection Measurements (Reflection Density)." The measurements were made within a circle 4.76 mm in diameter at the center of each step and the certified values apply to this area only.

The densities listed on the envelope are the averages of three independent measurements. The total uncertainty is 0.02 or 2 percent, whichever is greater.

The densities of this reflection step tablet may change with time. To minimize such changes, the tablet should be stored in a cool, dry place, where it will not be exposed to light, or other radiant energy, or to chemical fumes or dust in the air. Scratches, abrasion marks, or foreign matter on the tablet can change the density. Fingerprints are a common source of error which can be avoided by handling the step tablet by its edges only and by the use of clean cloth gloves sold by photographic dealers for this purpose. Any attempt to clean the step tablet, other than to remove dust with a soft camelhair brush, is also likely to change the densities.

Measurements leading to certification were made by L.E. Fink of the Radiometric Physics Division, NBS National Measurement Laboratory.

The technical and support aspects involved in the certification and issuance of this Standard Reference Material were coordinated through the Office of Standard Reference Materials by R.W. Seward.

Washington, D.C. 20234 December 11, 1980 George A. Uriano, Chief Office of Standard Reference Materials