



Standard Test Method for Comparing Lift-Off Correction Media¹

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1. Scope

1.1 This test method provides information and test procedures for evaluating several performance qualities of typewriter or printer lift-off correction tapes and tabs on a comparative basis for general office use.

1.2 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

D 3460 Specification for White Watermarked and Unwatermarked Bond, Mimeograph, Duplicator, and Xerographic Cut-Sized Office Papers²

F 221 Terminology Relating to Carbon Paper and Inked Ribbon Products and Images Made Therefrom²

F 497 Practice for the Use of the Electric and Electronic Typewriter as a Test Instrument²

2.2 ANSI Standard:

PH2.36 Terms, Symbols, and Notation for Optical Transmission and Reflection Measurements (Optical Density)³

PH2.17 Density Measurements—Geometric Conditions for Reflection Density³

PH2.18 Density Measurements—Spectral Conditions³

3. Definitions

3.1 For definitions of terms used in this test method, refer to Terminology F 221.

4. Summary of Test Method

4.1 This test method consists of testing typewriter and printer lift-off correction tapes and tabs under actual and simulated use conditions, using several techniques generally accepted in the inked ribbon industry. All tests should be performed under the same conditions so that comparative results may be obtained.

¹ This test method is under the jurisdiction of ASTM Committee F-5 on Business Copy Products and is the direct responsibility of Subcommittee F05.02 on Inked Ribbons and Carbon Paper.

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² *Annual Book of ASTM Standards*, Vol 15.09.

³ Available from American National Standards Institute, 11 W. 42nd St., 13th Fl., New York, NY 10036.

5. Significance and Use

5.1 This test method may be used to evaluate several performance characteristics of typewriter and printer lift-off correction media on a comparative basis.

5.2 This test method is suitable for comparative service evaluation and research and development.

5.3 This test method is suitable for manufacturing control on a limited basis, due to the length of time required for some tests.

6. Interferences

6.1 The capability of the typewriter or printer to register properly in initial impact and correction mode will affect the results of this test procedure. A properly adjusted machine is necessary to obtain reproducible results.

6.2 Different typewriters and printers with varying type fonts may give different results. For the widest range of acceptability, use different typewriters and printers with various type fonts. Similarly, a variety of test papers may be used to increase the applicability of this procedure.

7. Apparatus and Materials

7.1 *Electric or Electronic Typewriter*—Calibrate and adjust in accordance with the manufacturer's suggestions and Practice F 497.

7.2 *Reflection Densitometer*, meeting the geometric conditions of PH2.17 and the spectral conditions of PH2.18 and measuring reflection density as defined in ANSI PH2.36. Aperture size to be approximately $\frac{3}{16}$ -in. (4.75-mm) diameter.

7.3 Environmental Chambers:

7.3.1 Device shall be capable of maintaining $120 \pm 2^\circ\text{F}$ ($49 \pm 1^\circ\text{C}$) at $40 \pm 5\%$ relative humidity for 48 h. This condition is used in 11.3 to determine the effects of high temperature.

7.3.2 Device shall be capable of maintaining $120 \pm 2^\circ\text{F}$ ($49 \pm 1^\circ\text{C}$) at $83 \pm 3\%$ relative humidity for 48 h. This condition is used in 11.4 to determine the effects of high humidity. It should be noted that at these conditions, even a slight temperature change could cause the percent of relative humidity to go outside the specified range.

7.4 Magnifier, 4×

7.5 *Paper*—A white bond paper conforming to Specification D 3460, Grade 4, Type I, having a basis weight of 20 lb for 17 by 22 in. (432 by 559 mm) by 500 sheets (75 g/m²). The felt side of the paper shall be used for the test. All tests shall be made along the machine direction of the paper.