



Designation: F 92 – 93 (Reapproved 1998)

Standard Practice for Determination of Character Yield of Inked Fabric Typewriter and Printer Ribbons¹

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1. Scope

1.1 This practice covers the determination of the usable image producing life of an inked fabric typewriter ribbon or an inked fabric printer ribbon expressed as the number of impressions obtainable from a given unit.

1.2 This practice is not applicable to one-time typewriter ribbons such as carbon ribbons.

1.3 This practice is suitable for narrow printer ribbons with a width of 2 in. (50.8 mm) or less.

1.4 The values stated in inch-pound units are to be regarded as the standard. The SI units given in parentheses are for information only.

1.5 *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 685 Practice for Conditioning Paper and Paper Products for Testing²

D 725 Method for Identification of Wire Side of Paper³

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

F 149 Terminology Relating to Optical Character Recognition²

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

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

F 1174 Practice for Using a Personal Computer as a Test Instrument²

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

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

³ Discontinued 1980; replaced by D5039 in 1990.

2.2 ANSI Standards:

PH 2.17 Density Measurements—Geometric Conditions for Reflection Density⁴

PH 2.18 Density Measurements—Spectral Conditions⁴

3. Terminology

3.1 Definitions:

3.1.1 For definition of terms related to this practice refer to Terminology F 149 and F 221.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *hot spotting*—printed images produced with an inked fabric ribbon where occasional individual images are darker than those around them. This condition occurs when the amount of ink is not consistent throughout the fabric ribbon.

4. Summary of Practice

4.1 This practice consists of testing a ribbon under simulated use conditions by employing a programmed electric typewriter or computer printer to use the ribbon completely.

5. Significance and Use

5.1 This practice is used to determine the number of useful impressions obtainable under normal operating conditions of a given typewriter or printer ribbon. It is suitable for service evaluation or research and development. This practice is generally not considered practical for manufacturing control specification acceptance because of the length of time required to obtain results.

5.2 Interpretation of the test result is to be made on a comparative basis, not on the basis of absolute values.

6. Interferences

6.1 Different typewriters, printers, print speeds, platens, type or font styles, impact adjustments, and print modes will cause variation in results. Calibration as described in Section 10 will give the same results.

6.2 Type, thickness, and weight of fabric will cause variations in image quality.

⁴ Available from American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036.