



Standard Practice for Image Evaluation of Electrostatic Business Copies¹

This standard is issued under the fixed designation F 360; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

INTRODUCTION

The evaluation of the images obtained from various types or models of office copy systems can become a complicated process, requiring carefully prepared test masters and expensive test equipment. The copying needs of individuals and firms also vary considerably as does their ability to evaluate results reported in technical terms. It is, however, within the capability of most persons interested in the results obtained from copying systems to subjectively and visually compare prints reproduced from originals that are pertinent to their copying requirements.

1. Scope

1.1 This practice guides the user toward preparing an original test subject, meaningful to his specific copying needs and to suggest ways in which the test subject may be used to evaluate images from office copy systems.

1.2 Additional evaluation of image characteristics are covered in Practice F 807 and Test Method F 875.

1.3 *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:

F 807 Practice for Determining Resolution Capability of Office Copiers²

F 875 Test Method for Evaluation of Large Area Density and Background on Office Copiers²

3. Summary of Practice

3.1 This practice involves the preparation of one or more test originals and their reproduction. Subjective comparisons of the test original(s) to the copies allow the user to evaluate the usefulness of the copy system for his needs.

4. Significance and Use

4.1 Subjective evaluations of copies made from test originals can be used to determine the usefulness of a given copy

system in a specific user application. Since many variables operate to affect the copy quality at any given time, small changes in quality may not have any practical significance for many users.

5. Interferences

5.1 Many copy systems are subject to variation due to fluctuations of line voltage. It is conceivable that such fluctuations may cause a normally useful system to give poor results. The manufacturer should be consulted regarding the need for voltage-stabilizing devices which can usually be easily installed.

5.2 Results from copy systems can vary depending upon the length of time the system has been operating. The first print after a system has been shut down for a weekend, for instance, can be of a different quality than subsequent prints made after some time of operation.

5.3 Excessively high or low relative humidity can also cause variations in performance, not encountered under normal conditions.

5.4 Variations in copy system performance over relatively long periods can occur. It is recommended that the test procedure be replicated after a sufficient period to determine long-term stability.

5.5 Suppliers for copy systems are often purchased from several sources and can affect the results obtained from a given copy system.

5.6 Due to normal cycling within some copiers, minor variations in copy quality attributes such as density may be observed from one copy to the next within a given copy run.

6. Test Original

6.1 More than one test subject may be required due to varying copying needs. The test subject or subjects should reflect the users specific copying needs and might be single

¹ This practice is under the jurisdiction of ASTM Committee F05 on Business Imaging Products and is the direct responsibility of Subcommittee F05.04 on Electrostatic Imaging Products.

Current edition approved Oct. 29, 1982. Published December 1982. Originally published as F 360 – 72. Last previous edition F 360 – 72(1978).

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