

FIPS PUB 84



FEDERAL INFORMATION
PROCESSING STANDARDS PUBLICATION

1980 OCTOBER 31

U.S. DEPARTMENT OF COMMERCE / National Bureau of Standards



MICROFILM READERS

JK
468
.A3A8
NO. 84
1980

CATEGORY: HARDWARE STANDARD
SUBCATEGORY: COMPUTER OUTPUT
MICROFILM READERS

U.S. DEPARTMENT OF COMMERCE, Philip M. Klutznick, Secretary

Jordan J. Baruch, Assistant Secretary for Productivity,
Technology and Innovation
NATIONAL BUREAU OF STANDARDS, Ernest Ambler, Director

Foreword

The Federal Information Processing Standards Publication Series of the National Bureau of Standards is the official publication relating to standards adopted and promulgated under the provisions of Public Law 89-306 (Brooks Act) and under Part 6 of Title 15, Code of Federal Regulations. These legislative and executive mandates have given the Secretary of Commerce important responsibilities for improving the utilization and management of computers and automatic data processing in the Federal Government. To carry out the Secretary's responsibilities, the NBS, through its Institute for Computer Sciences and Technology, provides leadership, technical guidance and coordination of Government efforts in the development of guidelines and standards in these areas.

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James H. Burrows, Director
Institute for Computer Sciences
and Technology

Abstract

The objective of this standard is to facilitate effective information interchange when the information is recorded on microforms generated by computer systems. The standard defines the minimum acceptable image quality for microfilm reading devices for the display of computer output microforms. It also sets requirements for heat and noise factors associated with the safe use of such reading devices.

This standard adopts in whole the American National Standard for Microfilm Readers (ANSI/NMA MS20-1979).

KEY WORDS: American National Standard; Computer Output Microfilm (COM); Federal Information Processing Standard (FIPS); illumination; image quality; microfilm; microform; readers.

Nat.Bur.Stand. (U.S.), Fed.Info.Process.Stand.Publ.(FIPS PUB) 84, 4 pages.
(1980)
CODEN:FIPPAT

For sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

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ANNOUNCING THE STANDARD FOR



MICROFILM READERS

Federal Information Processing Standards Publications are issued by the National Bureau of Standards pursuant to section 111(f)(2) of the Federal Property and Administrative Services Act of 1949, as amended, Public Law 89-306 (79 Stat. 1127), Executive Order 11717 (38 FR 12315, dated May 11, 1973) and Part 6 of Title 15 Code of Federal Regulations (CFR).

1. Name of Standard. Microfilm Readers.
2. Category of Standard. Hardware Standard, Computer Output Microfilm Readers.
3. Explanation. This standard provides the minimum levels of image quality, illumination, and related characteristics for equipment that displays computer-generated microforms which are made in accordance with Federal Information Processing Standards Publication (FIPS PUB) 54, Computer Output Microform (COM) Formats and Reduction Ratios, 16 mm and 105 mm. This standard also contains sections on maximum safe temperatures and maximum acceptable noise levels.
4. Approving Authority. Secretary of Commerce.
5. Maintenance Agency. U.S. Department of Commerce, National Bureau of Standards (Institute for Computer Sciences and Technology).
6. Cross Index. American National Standard for Microfilm Readers (ANSI/NMA MS20-1979).
7. Related Documents. Federal Information Processing Standards Publication, Computer Output Microform (COM) Formats and Reduction Ratios, 16 mm and 105 mm (FIPS PUB 54).
8. Applicability. This standard is applicable to the acquisition of microform readers used by Federal agencies to display computer-generated microforms. Users of existing equipment are encouraged to employ this standard. Equipment not in accordance with this standard should be evaluated periodically by Federal agencies because readers with inadequate image quality impact on productivity by causing misreading (errors) and fatigue.
9. Specifications. This standard adopts in whole the American National Standard for Microfilm Readers (ANSI/NMA MS20-1979).
10. Qualifications. When microforms contain characters smaller than those permitted by FIPS PUB 54, such as in graphic art materials or engineering drawings, the resolving power of the reader must be increased above the minimum level specified. Appendix A of the standard tabulates resolving power requirements. Appendix B of the standard contains a list of variables

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or specific features of equipment covered by this standard to which agencies may require conformance as appropriate to their application requirements.

11. **Implementation Schedule.** All applicable equipment ordered on or after the date of this FIPS PUB must be in conformance with this standard unless a waiver has been obtained in accordance with the procedure described below.

Exceptions to this standard are made in the following cases:

a. For equipment installed or on order prior to the effective date of this standard.

b. Where procurement actions are in the solicitation phase (i.e., Requests for Proposals or Invitations for Bids have been issued) prior to the effective date of this standard.

12. **Waivers.** Heads of agencies may request that the requirements of this standard be waived in instances where it can be clearly demonstrated that there are appreciable performance or cost advantages to be gained and that the overall interests of the Federal Government are best served by granting the requested waiver. Such waiver requests will be reviewed by and are subject to the approval of the Secretary of Commerce. The waiver request must address the criteria stated above as the justification for the waiver.

Forty-five days should be allowed for review and response by the Secretary of Commerce. Waiver requests shall be submitted to the Secretary of Commerce, Washington, DC 20230, and labeled as a Request for a Waiver to a Federal Information Processing Standard. No agency shall take any action to deviate from the standard prior to the receipt of a waiver approval from the Secretary of Commerce. No agency shall begin any process of implementation or acquisition of non-conforming equipment unless it has already obtained such approval.

13. **Where to Obtain Copies.** Copies of this publication are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. (Sale of the included specifications document is by arrangement with the American National Standards Institute and the National Micrographics Association.) When ordering, refer to Federal Information Processing Standards Publication 84 (FIPS-PUB-84), and title. Copies of standards and documents referenced and listed in Section 10 of the standard are available from ANSI and NMA. Documents with the prefix MS are available from the National Micrographics Association, 8719 Colesville Road, Silver Spring, MD 20910. The other documents are available from the American National Standards Institute, 1430 Broadway, New York, NY 10018. Payment may be made by check, money order, or deposit account.