



NOVEMBER 1980

RECOMMENDED PRACTICE
FOR
MEASUREMENT OF X-RADIATION
FROM
POWER TUBES

FORMULATED BY
EIA TUBE ENGINEERING PANEL ADVISORY COUNCIL
(TEPAC)

TEPAC PUBLICATION No. 181
(Revision of TEPAC Publication No. 81)

Published by
ELECTRONIC INDUSTRIES ASSOCIATION
Engineering Department
2001 Eye Street, N.W., Washington, D.C. 20006

PRICE: \$4.00

RECOMMENDED PRACTICE FOR MEASUREMENT OF X-RADIATION FROM POWER TUBES

TEPAC PUBLICATION NO. 181

This publication was prepared by the JT-32 Committee on Electron Tube Safety and approved by the Tube Engineering Panel Advisory Council (TEPAC)

1. Purpose and Scope

- 1.1 Purpose - To obtain the X-radiation characteristics of power tubes in order to determine the levels emitted by the tubes when they are operated with integral tube shielding in place, but without external shielding. (This publication replaces and supersedes JEDEC Publication No. 81.)
- 1.2 Scope - This test method applies to the measurement of incidental X-radiation emitted from power tubes.

CAUTION: SAFETY CONSIDERATIONS

Measuring instruments should be properly grounded.

Caution should be taken to avoid shock hazard, particularly in the vicinity of the anode connection and the voltage metering system.

Safety glasses should be worn at all times during the measurement procedure.

X-ray film badges should be worn in accordance with established plant safety practices for monitoring radiation dosage.

2. Apparatus

2.1 Search Instruments - For Initial Survey

- a. Rapid response instruments used for locating the position of maximum intensity.

Example: Texas Nuclear Model 2652 GM Portable Survey Meter

- b. X-ray Film. For use in initial surveys to determine the X-radiation pattern and for locating positions of maximum