

ICS 17.240
CCS A 58

JJG

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

JJG 744-2004

Replacing JJG 744-1997

**Verification Regulation of Medical diagnostic X-ray Radiation
Source
(English Translation)**

Issued on: June 4, 2004

Implemented on: December 1, 2004

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine released, This regulation was approved by the General
Administration of Quality Supervision, Inspection and Quarantine on
June 04, 2004, and since**

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1 Scope

This procedure applies to the first test of medical diagnostic X-ray radiation source, follow-up test and the use of the test.

This procedure does not apply to X-ray (CT) radiation sources, digital radiography (CR, DR) radiation sources, mammography Radiation source.

2 References

This regulation cites the following documents.

GB 9706.12-1997 "Medical Electrical Equipment Part I. Safety General Requirements Third, the standard parallel diagnosis Broken X-ray equipment radiation protection General requirements " GB 8279-2001 "medical X-ray diagnosis of radiation health protection requirements" GB 9706.3-2000 "Medical electrical equipment - Part 2. Diagnostic X-ray generator high-voltage generator Special safety requirements " GB 3100 ~ 3102-1993 "quantity and unit" GB/T 11755.1 ~ 11755.2-1989 "medical diagnostic X-ray tube voltage and tube current test method" GB/T 10149-1988 "Medical X-ray equipment terminology and symbols" SJ/T 11094-1996 "Medical X-ray image intensifier TV system performance parameters measurement method" WS/T 189-1999 "Medical X-ray diagnostic imaging quality control testing specification" YY/T 0063-2000 "Medical diagnostic X-ray tube assembly focus characteristics" Federal Performance Standard for Diagnostic X-ray Systems and Their Major Components; Final Rule. Department of Health and Human Services and Drug Administration 21 CFR Part 1020 [Federal Register. May 19, 1994] Part VI when using this code, care should be taken to use the currently valid version of the above cited references.

3 Terms and measurement units

3.1 Terms

3.1.1 Kinetic kerma

Uncharge ionized particles, the mass of the material in the dm release of all charged particles of the initial kinetic energy Sum dE_{tr} divided by dm. The symbol is K.

3.1.2 kermarate energy rate kermarate the increase in kinetic energy, dK, over dt, divided by dt. The symbol is K.

3.1.3 Half value layer half-value layer the thickness of the weakened layer that reduces the amount of unidirectional particle flow to half the initial value. The symbol is HVL.

3.1.4 X-ray tube voltage X-ray tube voltage Potential difference between anode and cathode of X-ray tube.