

QUASAR™ Beam Geometry MLC Phantom

**Nondosimetric
Quality
Assurance
For your
Multi Leaf
Collimator**



Test the Display of MLC shaped fields on Transverse and Reconstructed CT Images

Standard Beam Geometry Phantom tests:

- Multiplanar CT Image reconstruction, geometric accuracy, orientation, and 3D measurement tools on CT simulators, radiation therapy planning systems and other imaging workstations
- Beam display graphics at oblique gantry and couch angles
- Digitally reconstructed radiographs
- Portal images on linear accelerators
- Image transfer, storage, retrieval, DICOM tools on all workstations
- 2D image geometric accuracy and measurement tools

Additional MLC Option tests

5mm (MLC), 4 mm (mini MLC) and 3mm (micro MLC) steps allow Medical Physicists to test the integrity of treatment planning systems and CT-simulators in the display of MLC-shaped fields on transverse or reconstructed images.

Compatible with the following MLCs

- Varian; MLC 120, MLC 80, MLC 52
- Elekta (80 leaves)
- Siemens (58 leaves)
- Brainlab (52 leaves, 3mm)
- Radionics (62 leaves, 4 mm)

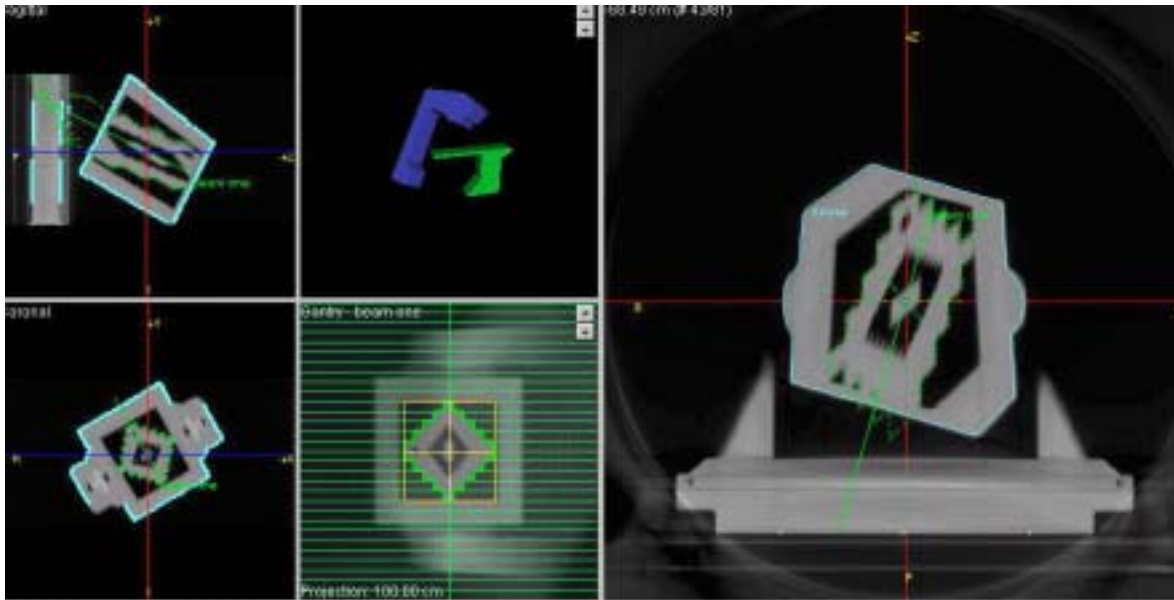
The QUASAR™ Quality Assurance System for Advanced Radiotherapy tests a wide variety of dosimetric and nondosimetric functions of Radiation Therapy Planning Systems and CT simulators using a single set of test objects.

A valuable part of any quality assurance program the QUASAR™ phantoms are ready to be incorporated into your QA protocols today. The phantoms are used for regularly scheduled testing, as well as commissioning new systems and upgrades, and testing repairs.

QUASAR™ provides you with the confidence that your radiation treatment planning software and CT simulators are performing to their full potential.

Specifications

- 10, and 15 cm square collimated beam phantom plus 3mm, 4 mm and 5 mm steps 17 cm long
- Phantom rotates about isocenter on vertical (couch) and horizontal (gantry) axes
- Rotational scale readouts correspond to ICRU 42
- 1 mm diameter steel ball located at the isocenter
- "Z" wire fiducial marker in base (stainless steel)
- 3 point leveling system with built in level indicator
- Laser alignment marks
- Overall height 28 cm, width 36.6 cm, length 42.5 cm
- Weight 13 kg
- Materials: acrylic, Delrin, nylon, s.steel ball, rubber
- User's Guide with Quality Assurance Worksheets
- Container for storage and handling, optional shipping case



digitally reconstructed radiograph from transverse CT images with oblique couch and gantry angle

References:

- 1) A Quality Assurance Phantom for Three-Dimensional Radiation Therapy Treatment Planning, Tim Craig, Denis Brochu, and Jake Van Dyk; Int. J. Radiation Oncology Biol. Phys., Vol. 44, No. 4, pp. 955-966, 1999.
- 2) AAPM Radiation Therapy Committee Task Group 53: Quality Assurance for Clinical Radiotherapy Treatment Planning, Benedick Fraass, Karen Doppke, Margie Hunt, Gerald Kutcher, George Starkschall, Robin Stern, Jake Van Dyk; Med. Phys. 25 (10), October 1998, pp. 1773-1829.



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