

IMRT DOSE VERIFICATION PHANTOM

VERIFY PATIENT IMRT TREATMENT PLANS

The anthropomorphic design of the IMRT Dose Verification Phantom mimics human anatomy which assists in set up and treatment for patient dose verification. It is ideal for prostate and head and neck regions, as well as for commissioning respiratory gated protocols because the accuracy of prescribed dose is evaluated and confirmed in simulated patient conditions. The IMRT Dose Verification Phantom is available in Acrylic REF 91230 or Virtual Water™ REF 91235 material.

ASSURE ACCURACY IN RESPIRATORY GATING WITH THE OPTIONAL RESPIRATORY GATING PLATFORM

The unique Respiratory Gating Platform REF 72249 simulates breathing providing the means to create a comprehensive program for commissioning, training, quality assurance, and dose verification of gated IMRT treatments.

FAST AND VERSATILE SET-UP HELPS COMPLETE DOSE VERIFICATION QUICKLY AND EASILY

The IMRT Dose Verification Phantom can combine absolute, relative and point dose measurements, with up to 16 chamber positions, 5 film positions and up to 9 diodes or TLDs. By using a fast coronal film orientation, the IMRT Dose Verification Phantom captures the dose contribution of all fields and segments, as well as showing hot and cold spots on the film, for comparison to the treatment plan. The IMRT Dose Verification Phantom effectively evaluates head and neck junction issues of upper neck and half beam superclav fields. It also incorporates inhomogeneity structures with bone and lung equivalents.



Features

- Solid Acrylic (Virtual Water™) Ion Chamber Slab has six cavities for thimble ion chamber measurement. The diameter of each cavity is 19 mm. Solid acrylic (Virtual Water) plugs are included to fill the cavities for simulated patient thickness. One solid acrylic (Virtual Water™) plug is drilled for the ion chamber of choice. A bone equivalent plug is included for bone simulation of heterogeneity measurements.
- Solid Acrylic (Virtual Water™) Blank Slab is a solid slab to provide simulated patient build-up material. Four 2 mm steel balls are imbedded in the slab as reference markers for 3D orientation of film on TPS.
- Solid Acrylic (Virtual Water™) Lung Slab has two cavities for simulated lung inserts, two cylindrical cavities for thimble ion chamber placement and a set of two tissue equivalent lung inserts for lung simulation. Optional Acrylic inserts REF 70052 (Virtual Water™ inserts REF 70053) convert the Lung Slab into a solid slab.



Ion Chamber Slab



Blank Slab

Optional Accessories

- Solid Acrylic MOSFET Diode/TLD Slab REF 70608 (Virtual Water™ REF 72183) has nine channels for MOSFET diodes or TLD chips which can be placed at any point in a field for point dose measurements. The small channel size was designed not to perturb other measurements allowing this slab to be used as solid slab for increased patient thickness. MOSFET diodes are isotropic for dose measurements from any angle.
- Optional Acrylic Inserts REF 70052 (Virtual Water™ REF 70053) convert the Lung Slab into a solid slab.
- Carrying Case REF 50064 has extendable handles and wheels for easy transport.
- Simulate tumor movement with the Lung Tumor Insert REF 70170.



Respiratory Gating Platform REF 72249 with IMRT Dose Verification Phantom

REF 91230 - Acrylic IMRT Dose Verification Phantom REF 91235 - Virtual Water™ IMRT Dose Verification Phantom

IMRT DOSE VERIFICATION PHANTOM (REF 91230) SPECIFICATIONS

INCLUDED COMPONENTS

- (2) Acrylic/Virtual Water ion chamber slabs with 6 cavities for ion chamber placement
- (2) Acrylic/Virtual Water blank slabs for build up thickness
- (2) Acrylic/Virtual Water lung slabs with cavities for simulated lungs
- (16) Solid Acrylic/Virtual Water plugs to fill unused ion chamber cavities
- (1) Plug with cavity drilled for ion chamber of your choice

- (1) Bone-equivalent plug
- (1) Lung-equivalent set with four (4) inserts for lung phantom voids
- (12) Location pins

DIMENSIONS

Height (each slab): 3.00 cm (1.18 in)

Height (six slabs): 18.00 cm (7.09 in) Width (each slab): 30.00 cm (11.81 in) Length (each slab): 45.00 cm (17.72 in) Weight (six slabs): 22.7 kg (50.0 lbs)

PRODUCT STANDARDS C€

 $\textit{Virtual Water} \ ^{\text{\tiny{IM}}} \ \textit{is a trademark of Med-Cal. Specifications subject to change without notice.}$



IMRT DOSE VERIFICATION PHANTOM REF 91210

