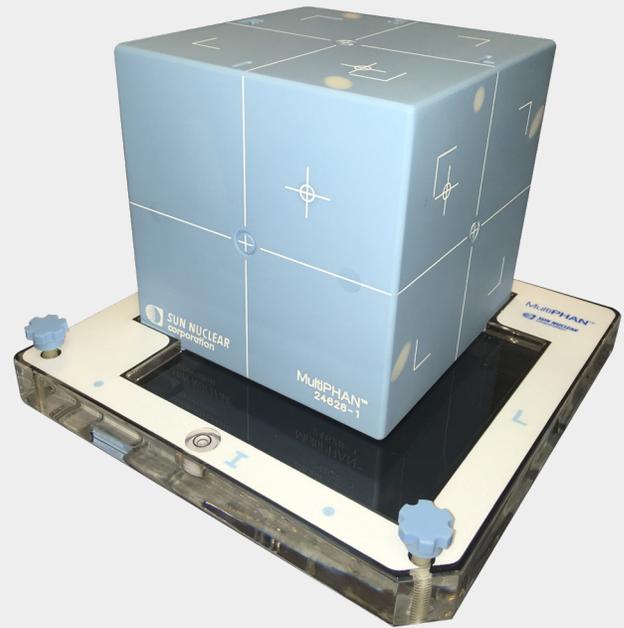


MultiPHAN™

Daily Isocenter Checks Made Easy

Ensure your daily alignment checks are fast and effective with the MultiPHAN phantom. MultiPHAN is the ideal solution for verifying all your image guidance and alignment systems -- from lasers to EPIDs to CBCT.



TG-142 requires confirmation that imaging system isocenters match the treatment isocenter, and that repositioning can be performed accurately. This is important to ensure that a patient, who may be imaged and repositioned with a variety of different systems, can ultimately be aligned with the radiation treatment isocenter.

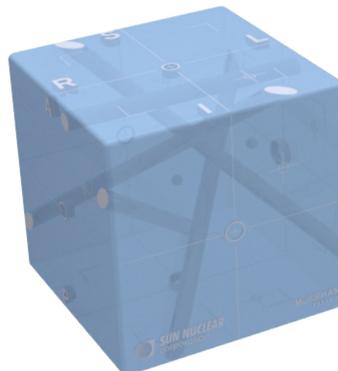
MultiPHAN is simple, yet comprehensive, and can validate the alignment of:

- Treatment beam isocenter
- Light field
- Lasers
- CBCT
- kV imaging (e.g. OBI)
- MV EPID
- TomoTherapy® MVCT
- Treatment couch
- Optical Guidance systems

In addition, MultiPHAN can test registration and repositioning using an offset target. The included stand is custom designed to work with two non-metallic internal markers, to make repositioning tests simple and precise. The stand also enables easy testing of rotational adjustments and 6D couch-based repositioning.

MultiPHAN can also be used for daily ODI checks.

See back for details >



MultiPHAN features a set of rods for ease of registration, a ceramic central target, a ceramic offset target, and light field localization scribes.

Specifications

Alignment System: 5 bone-equivalent rods, easy to visualize and register on the linac; compatible with CBCT, MV EPID, kV imaging, 6D couches, and more

Isocenter Marker: Low-Z ceramic bead; encircled by a groove on cube faces to check alignment in planar images

Offset Marker: Low-Z ceramic bead at a fixed offset from isocenter, for registration and repositioning

Light Field Test: Scribe lines corresponding to a 10 cm x 10 cm light field

Tissue Equivalent: HE CT Solid Water® base construction, with Gammex bone-mimicking registration rods

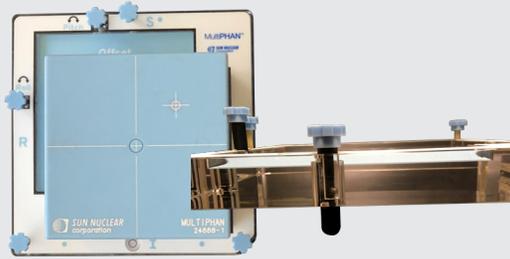
Easy Alignment: Thin white laser scribe lines extend the full phantom length for fast and accurate alignment

Stand: Easily and precisely shift the cube from an isocentric alignment to the offset target with this discrete-positioning stand. The stand can also enact rotations to test registration and 6D repositioning.

Case: Included

Dimensions: 14 cm x 14 cm x 14 cm

Weight: 2.7 kg (6.0 lbs)



Use positioning stand to easily and precisely shift the MultiPHAN from an isocentric alignment to the offset target. The stand can also enact rotations to test registration and 6D repositioning by utilizing two kickstands, one for Roll and one for Pitch.

PARAMETER	MEASUREMENT	EXPECTED	DIFFERENCE	TOLERANCE
Output Dose (cGy)	100.27	100.00	0.27	±0.5%
Axial Symmetry (%)	-0.52	-0.52	0.00	±0.5%
Trans Symmetry (%)	0.04	-0.14	0.18	±0.5%
Flatness (+/-%)	1.34	1.46	-0.12	±1.5%
Energy (%)	-1.12	0.00	-1.12	±1.5%
X Size (cm)	20.22	20.23		
Y Size (cm)	20.15	20.15		
X Shift (cm)	0.02	0.02		
Y Shift (cm)	-0.02	-0.02		

Easing TG-142 Requirements

The SunCHECK™ Machine Platform provides all 127 tasks, as defined by TG-142. Collect your alignment data with the MultiPHAN and enter it into SunCHECK Machine for simple storage of all your TG-142 data.