

Model LIU-0312 Liu Calibration Check Phantom

The Model LIU-0312 Calibration Check Phantom is a convenient, water-filled acrylic phantom designed to be used for output checks and calibration of megavoltage machines in a radiotherapy department. This economical phantom can be used for both photon and electron beam QA.

The LIU Phantom is an acrylic cube with three custom-made ionization chamber holders for your particular chamber. Two small filler holes are in place to facilitate the filling and emptying of the phantom with water. A crosshair and the outline of a 10 cm x 10 cm field are inscribed on the four windowed walls.

The three chamber holder cavities are located at depths of 1 cm, 2 cm, 5 cm, and 10 cm, allowing measurements at d_{max} for photon beams. The chamber holder cavities are strategically located so that no cavity interferes with another cavity during measurements.

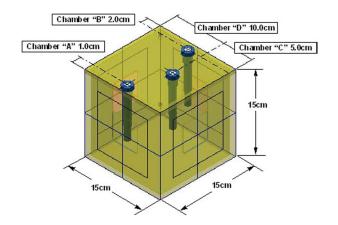
The LIU phantom allows for chamber placement to be consistent from week to week during measurements. Quick laser alignment checks can also simultaneously be performed.

This phantom was developed by James Liu, Ph.D. FACR, Providence St. Joseph Medical Center, Burbank, CA.

Features

- ▶ Photons and electron measurements at 1, 2, 5 and 10 cm depths
- ▶ Versatile phantom can be used for beam QA as well as field and symmetry measurements
- Laser alignment check can be performed at the same time
- Economical, lightweight, waterfilled phantom can be easily transported between rooms and/or treatment centers





Specifications

Material	Acrylic
Window Thickness	1.0 mm
Chamber Holder Wall Thickness	1.78 mm
Cavities	Custom drilled (specify chamber type) located at 1 cm, 2 cm, 5 cm, and 10 cm
Window Size	5 x 5 cm
Field Size	10 x 10 cm
Dimensions	15 x 15 x 15 cm (5.9 x 5.9 x 5.9 in)
Weight (empty)	0.8 kg (1.8 lbs)
Weight (full)	3.6 kg (7.9 lbs)

