

Multi-Energy QA Phantom

Test different types of Multi-Energy, Dual-Energy and Photon-Counting CT Protocols.

Perform System QA on DECT and PCCT systems.

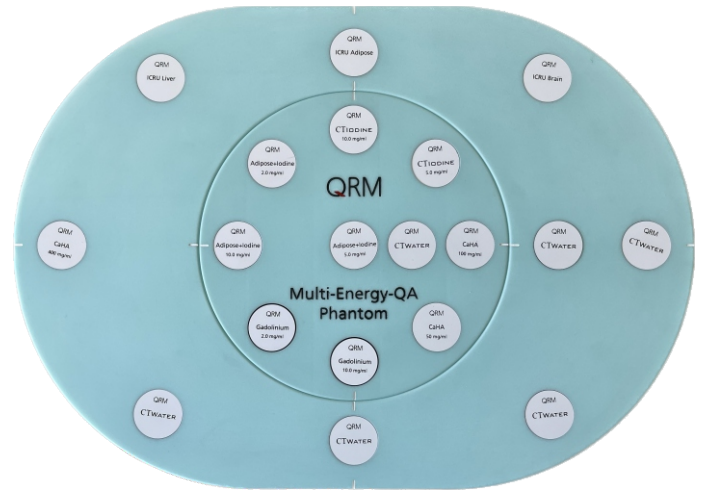
Investigate water and fat enriched with iodine and calcium.

The phantom is designed to test different types of CT modalities with dual-energy, multi-energy or photon-counting setups.

Image acquisition and image processing at multiple energy levels is improving visualization for computed tomography. The QRM Multi-Energy QA phantom is ideally suited to test multi-energy spectral CT protocols and post-processing techniques.

The phantom consists of a removable/stand-alone head phantom (Ø 160 mm cylinder) with 10 holes (Ø 25 mm) to house different inserts and an oval (QRM-10150) or an optional circular (QRM-10151) body, equipped with 9 bores. Body and Head section are made of water-equivalent material (CTwater).

The phantom is equipped with a set of 26 inserts including rods enriched with several contrast media (water+iodine, adipose+iodine) as well as calcium (water+calcium hydroxyapatite), each material with different concentrations. Additionally, water- and soft tissue-equivalent inserts (adipose, liver, brain - ICRU Report 44 and 46) are included. Mass density, concentration and electron density are provided for all materials.

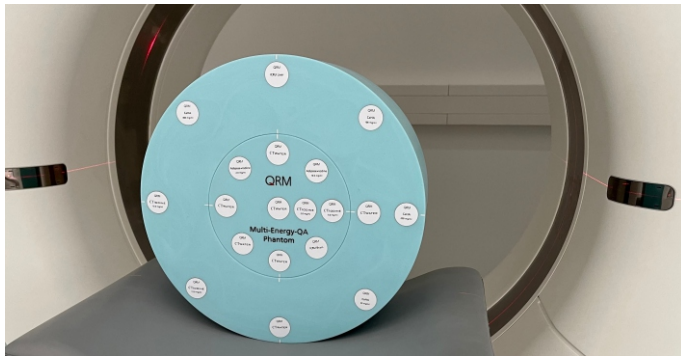
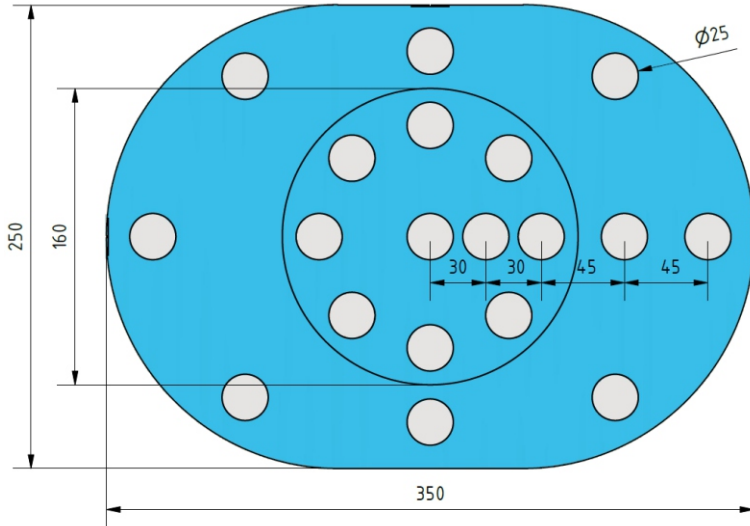


Multi-Energy QA Phantom



Multi-Energy QA Phantom on stand and optional ring

Multi-Energy QA Phantom



Optional circular body ring

Optional available

| | | |
|-----------------------------------|---|--|
| Ring D320 | CTWATER® D320mm / H125, 9 holes | |
| Inserts Gadolinium | Gadolinium® 5 inserts: 2, 5, 10, 15, 20 mg/ml | |
| Inserts ICRU Tissues | Tissue equivalents ICRU 44/46 Soft Tissue, Bone | |
| Additional Extension slabs | axial extension water equivalent | |
| Customized Inserts | upon request | |

Specifications

Body:

Phantom diameter: 250 mm x 350 mm
Phantom length: 125 mm
Holes: 9 pcs., 25 mm diameter

Head insert:

Phantom diameter: 160 mm
Phantom length: 125 mm
Holes: 10 pcs., 25 mm diameter

Material: CTWATER® (water-equivalent)

Inserts:

Diameter: 25 mm
Length: 125 mm

Phantom weight: 6.0 kg
Includes Stand
Includes Transport Case

26 inserts included

- CTWATER® (3 pcs.)
- Water + Iodine (6pcs.):
0.5, 1.0, 2.0, 5.0, 10.0 and 15.0 mg/cm³
- Adipose + Iodine (6pcs.):
0.5, 1.0, 2.0, 5.0, 10.0 and 15.0 mg/cm³
- Water + Ca hydroxyapatite (5pcs.):
25, 50, 100, 200, 400 mg/cm³
- ICRU Liver + Iron (3 pcs.)
- ICRU Adipose (1 pcs.)
- ICRU Brain (1 pcs.)
- Tube (Fillable rod) (1 pcs.)

Calibration protocol:

Physical density, concentration, electron density,
electron density relative to water
(additional values upon request)