

breastCT-QA Phantom

Measure imaging performance of Breast-CT Systems and other 3D Cone-Beam tomography equipment. Perform acceptance and constancy tests with a compact phantom.

The QRM-breastCT-QA Phantom is designed to perform quality checks and test the imaging performance of Breast-CT and CBCT systems.

The following image quality metrics can be obtained:

- CT value uniformity
- CT value accuracy
- Image noise
- Contrast-to-noise ratio
- Spatial resolution (3D MTF)

The phantom contains 3 defined sections:

Section I:

4 Inserts in water equivalent material (background), 13 mm diameter, 25 mm length: air, -3% contrast, +3% contrast and bone - arranged concentrically inside the phantom

Section II:

Homogenous water-equivalent section to measure uniformity and noise

Section III:

A centrally placed 12mm PTFE sphere to perform a 3D-MTF

Diameter (Ø): 140 mm

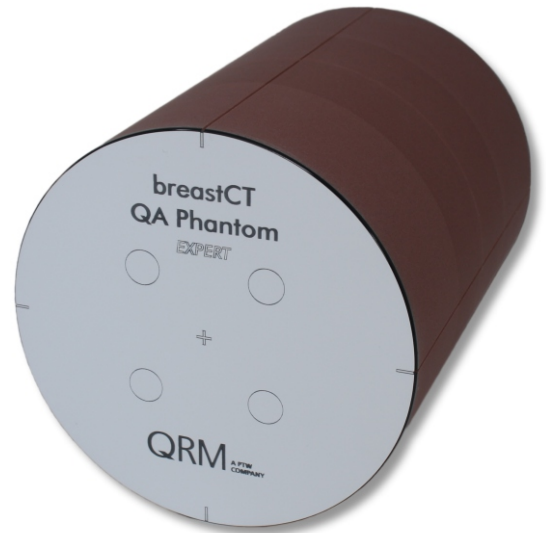
Length (z): 180 mm

Body: CTWater® (water equivalent material)

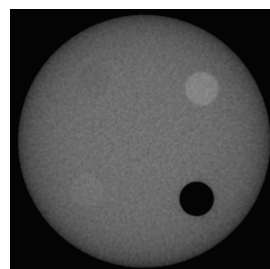
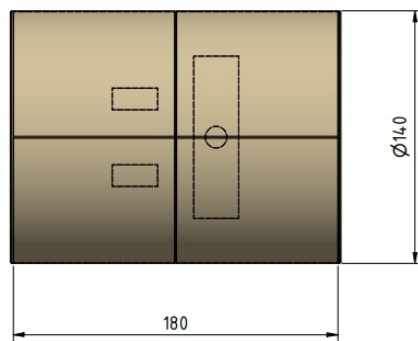
Sphere: PTFE, Ø 12 mm

Inserts: Ø 13 mm, Length 25 mm

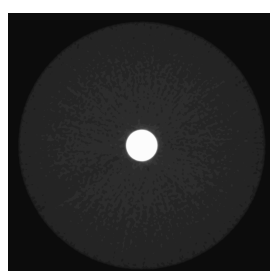
A dedicated evaluation software is currently not available.



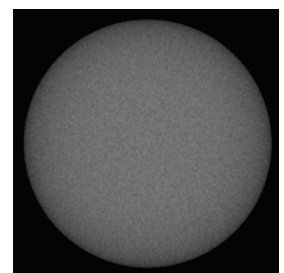
Breast-CT-QC Phantom



Section I



Section II



Section III