



Catphan® 606

The Catphan® 606 is designed to evaluate image performance of both MV and kV CT scanners.

This phantom combines numerous kV test objects used in other Catphan® models, with large diameter slice geometry wires and a high signal MTF point source designed to compensate for the reduced contrast in MV images. By moving key image geometry and sensitometry tests near the center of the phantom, we reduce measurement variations caused by scatter in cone beam and large beam CT systems.

Tests - Summary

- Scan slice geometry (kV and MV)
 - Slice width kV (0.15mm diameter wire ramps)
 - Slice width MV (0.635mm diameter wire ramps)
- High resolution (up to 15 line pairs per cm)
- Phantom position verification
- Patient alignment system check
- kV low contrast sensitivity (40mm length solid cast targets)
- Spatial uniformity
- Scan incrementation
- Noise (precision) of CT systems
- Circular symmetry
- Sensitometry (linearity samples: air, PMP, LDPE, H₂O, Polystyrene, Acrylic, Delrin, Teflon, 20% Bone, 50% Bone)
- Pixel (matrix) size
- Point spread function and modulation transfer function kV (50 μ diameter wire and 0.18mm Tungsten Carbide bead)
- Point spread function and modulation transfer function MV (0.3mm diameter wire)
- Edge spread function (20mm air circle)

