

# CT ACR 464 Phantom

Leverage a sophisticated design to comply with guidelines, and more.

- The only phantom needed to meet American College of Radiology (ACR) accreditation guidelines
- Versatility permits checking of multiple parameters, efficiently



With the CT ACR 464 Phantom, you gain a multi-functional resource for your department. Not only is it essential for compliance, it allows the testing of: positioning and alignment; CT number accuracy; slice thickness; low contrast detectability, image resolution; image uniformity; spatial resolution; inter and intra plane distance measurement accuracy; and more.

## Benefits

- Single phantom permits checking multiple parameters
- Compact design makes the phantom safe to store and easy to transport
- Automated software allows for fast and simple reporting of results



## Accessories

### CT ACR 464 Phantom Body Ring

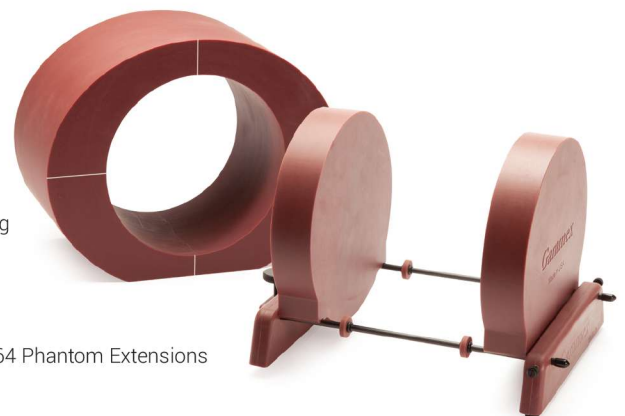
The CT ACR 464 Phantom can easily be inserted into the Body Ring adapter to permit fast imaging QA for a better indication assessment of a scanner's performance with large patients.

### CT ACR 464 Phantom Extensions

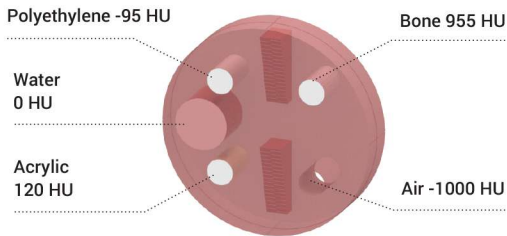
The CT ACR 464 Phantom Extensions accurately represent scatter effects from widebeam CT scanners, thus eliminating the need to add a water bolus or other material when measuring the CT ACR 464 Phantom.

CT ACR 464 Phantom Body Ring

CT ACR 464 Phantom Extensions

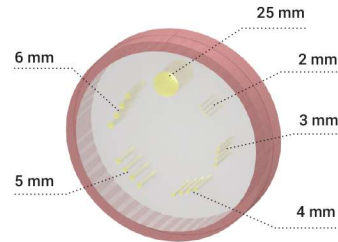


## CT ACR 464 Phantom modules



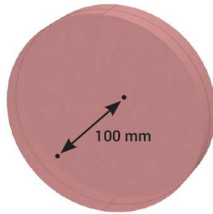
### MODULE 1

Positioning and alignment, CT number accuracy and slice thickness.



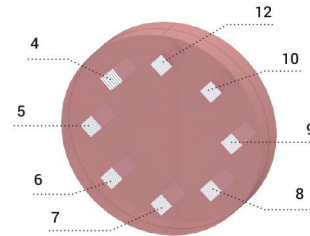
### MODULE 2

Low contrast resolution. Features a series of cylinders with different diameters, all at 0.6% (6 HU) difference from the background material.



### MODULE 3

CT number uniformity assessment. Includes two small targets for testing inplane distance measurement accuracy and more.



### MODULE 4

High contrast (spatial) resolution. Contains eight high contrast resolution patterns of 4, 5, 6, 7, 8, 9, 10 and 12 line pairs per cm.

## Specifications

Material:	Zero HU Solid Water®
Diameter:	20.0 cm (7.9 in)
Length:	16.0 cm (6.3 in)
Weight:	5.3 kg (11.7 lbs)

### Imbedded Test Objects

Water Equivalent Linearity Rod:	Solid Water, Zero HU
Bone Equivalent Linearity Rod:	Bone tissue equivalent material
Acrylic Linearity Rod:	Cast Acrylic
Polyethylene Linearity Rod:	Low Density Polyethylene
Low Contrast Module Matrix:	Ciba Geigy CB4 epoxy or equivalent
Low Contrast Rods:	Ciba Geigy CB4 epoxy (density adjusted to yield 6 ±0.5 HU difference) or equivalent

Tungsten Carbide Beads:	0.28 mm (0.011 in) in diameter grade 25 tungsten carbide beads
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Line pair Material:	6061 Aluminum and Polystyrene
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Steel Beads Intra-module Homogeneity:	The mean ROI values within any module, test objects excluded, can differ by no more than 2 HU
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Intra-phantom homogeneity modules 1, 3 & 4:	The average CT number a module must meet the requirements of 0 ±5 HU
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### Additional Accessories

Phantom Stand  
Soft Case  
Automated Analysis Software