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 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

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material:</td>
<td>Zero HU Solid Water®</td>
</tr>
<tr>
<td>Diameter:</td>
<td>20.0 cm (7.9 in)</td>
</tr>
<tr>
<td>Length:</td>
<td>16.0 cm (6.3 in)</td>
</tr>
<tr>
<td>Weight:</td>
<td>5.3 kg (11.7 lbs)</td>
</tr>
</tbody>
</table>

Imbedded Test Objects

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

Tungsten Carbide Beads: 0.28 mm (0.011 in) in diameter grade 25 tungsten carbide beads

Line pair Material: 6061 Aluminum and Polystyrene

Steel Beads Intra-module Homogeneity: The mean ROI values within any module, test objects excluded, can differ by no more than 2 HU

Intra-phantom homogeneity modules 1, 3 & 4: The average CT number a module must meet the requirements of 0 ±5 HU

Additional Accessories

- Phantom Stand
- Soft Case
- Automated Analysis Software