



ACR CT Accreditation Phantom

GAMMEX 464

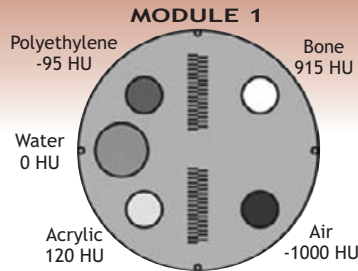
The Gammex 464 ACR CT Phantom is designed to be an integral part of the American College of Radiology (ACR) CT Accreditation Program. This voluntary program provides physicians with an opportunity for a comprehensive peer review of their CT facility, personnel qualifications, image quality and quality assurance programs. CT accreditation encourages patient's confidence and demonstrates your commitment to quality healthcare to payers, regulatory agencies and employers. The ACR CT Accreditation Phantom can be used for initial QA assessment and routine monthly QA testing to help ensure that patients are receiving the lowest possible CT dose.

Solid Water® construction makes for a convenient, physically stable test device that provides reproducible results over time. The phantom consists of four modules designed to examine a broad range of scanner parameters. It features white scribed markings on the axial, coronal and sagittal axis, and HEAD, FOOT and TOP markings to ensure proper alignment.

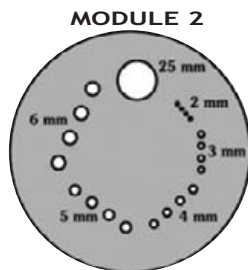
The optional phantom base, Gammex 464-STND (shown above with the phantom) provides stability, makes alignment easier and features built-in leveling devices.



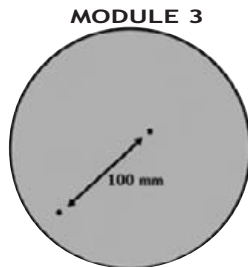
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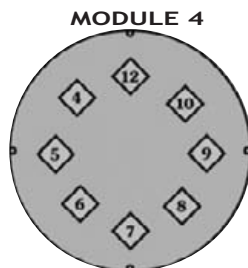
Positioning and alignment, CT number accuracy and slice thickness.



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



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



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

Phantom Construction

Matrix material . . . Solid Water®, 0 ±5 HU

Length 16 cm (6.30 in)

Diameter 20 cm (7.88 in)

Weight 5.3 kg (11.75 lbs)

Imbedded Test Objects

Water equivalent

linearity rod Solid Water®, 0 HU

Bone equivalent

linearity rod 915 HU 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 0.011 in diameter grade 25 tungsten

carbide beads

Line pair

material 6061 Aluminum and Polystyrene

Steel beads 1.00 mm grade 25 chrome steel balls

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 of a

module must meet the requirements

of 0 ±5 HU.

Optional Phantom Stand Available

Optional Hard and Soft Cases Available