
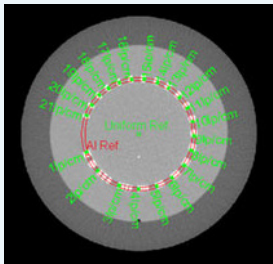
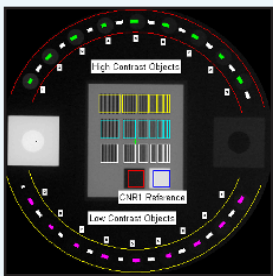


Radia is an à la carte-based software that allows you to perform comprehensive imaging QC at your facility. Easily customize your software package by adding the specific diagnostic modules you need to perform fully automated analyses on all phantoms used at your facility. Simple, easy-to-use tools provide complete scoring of all phantom parameters with precision and accuracy. With our automated tracking and trending features, you can toss the pencils, manual logs, spreadsheets and binders, and cut your record keeping time down to zero.

DIAGNOSTIC MODULES & PHANTOMS




MODULE NAME	PHANTOMS	ANALYSIS MEASUREMENTS
ACR CT Module	ACR CT Phantom	Landmark BB position, Landmark slice thickness, CT material values, CT material linearity, uniformity and noise power spectrum, resolution, MTF
ACR FFDM Module 	Gammex FFDM Phantom	Insert width, contrast analysis, and insert analysis (fibers, specs, and masses)
	CIRS FFDM Phantom	Insert width, contrast analysis, and insert analysis (fibers, specs, and masses)
ACR MRI Module	ACR Large MRI Phantom	Localizer line length, geometric accuracy, resolution, slice thickness, slice difference, geometric distortion, uniformity, ghosting, low contrast: spokes detected, and contrast to noise ratios
	ACR Medium MRI Phantom	Localizer line length, geometric accuracy, resolution, slice thickness, slice difference, geometric distortion, uniformity, ghosting, low contrast: spokes detected, and contrast to noise ratios
ACR Small MRI Module	ACR Small MRI Phantom (Extremity & Breast)	Localizer line length, geometric accuracy, resolution, slice thickness, slice difference, geometric distortion, uniformity, ghosting, low contrast: spokes detected, and contrast to noise ratios
Catphan/OBI Module 	CATPHAN® 500/600 Series Phantom	CT material values, CT number linearity, slice width (both horizontal and both vertical slices), ramp alignment, ramp yaw and tilt, rod distances (geometric distortion), low contrast spheres, contrast to noise ratio, CT uniformity and noise power spectrum, integral uniformity, resolution, MTF
	Elekta 503 CATPHAN® (XVI) Phantom	Spatial resolution, MTF (based on standard deviation), MTF curve, uniformity, sagittal geometry, low contrast, horizontal and vertical scaling, material values for LDPE and Poly
	Varian 504 & 604 CATPHAN® Phantom	CT material values, CT number linearity, slice width (both horizontal and both vertical slices), ramp alignment, ramp yaw and tilt, rod distances (geometric distortion), low contrast spheres, contrast to noise ratio, CT uniformity and noise power spectrum, integral uniformity, resolution, MTF
	Siemens MV CT (OBI) Phantom	Geometric analysis (BBs), high and low contrast objects, resolution line pairs detected, MTF (based on standard deviation), uniformity
CT Uniformity Module	Generic CT Water Phantoms	Uniformity, mean pixel value and SD by measurement position
Gamma Camera Uniformity Module	None (Flood field)	NEMA NU 1-2012: Useful field of view uniformity measurements and statistics, useful field of view defective pixels, central field of view uniformity measurements and statistics, and central field of view defective pixels

DIAGNOSTIC MODULES & PHANTOMS (CONT.)

MODULE NAME	PHANTOMS	ANALYSIS MEASUREMENTS
GE CT Module	Optima 660 Phantom	Contrast, CNR, slice thickness, alignment accuracy, MTF, modulation, low contrast, noise, uniformity
IEC 62464 MRI Module	IEC 62464 MRI Phantom	Uniformity, ghosting, contrast, CNR, geometric distortion, modulation, MTF, slice thickness
kV Imaging Module 	IBA Primus®-L Phantom	Noise and CNR for each step in the step wedge, CNR by contrast object, ytterbium indicator, central area uniformity, resolution line pairs detected, MTF, geometry. Couch placement analysis is supported.
	Leeds TOR 18FG Phantom	Contrast to noise ratio for high contrast and low contrast objects, resolution line pairs detected, modulation. Couch placement analysis is supported.
	PTW NORMI® 4 Phantom (20 x 20 cm and 30 x 30 cm)	Noise and CNR for each step in the step wedge, CNR by contrast object, ytterbium indicator, central area uniformity, resolution line pairs detected, MTF, geometry. Couch placement analysis is supported.
	Standard Imaging QcKv-1 Phantom	Contrast value, noise value, uniformity (NEMA), spatial resolution, modulation. Couch placement analysis is supported.

BASE MODULE

In order to utilize the Radia Diagnostic modules, you are first required to purchase the Radia base module (if you do not already have RIT *Complete*, RITG142, or RITG148+), which offers basic imaging QC functionality and includes our automated features.

FEATURE	DETAILS
Locate & Import Images	DICOM directory browser, open directory browser, DICOM file filter for organizing your images
Output Formats	Print, PDF, Excel (with custom templates)
DICOM Image Viewer & DICOM Tag Viewer	View DICOM images and DICOM tags
Manual Measurements	Distance, angle, profile, histograms, round and square ROI. ASCII output of profiles.
Monitor Image Quality	SMPTE pattern and TG18 images with custom templates (print, PDF, Excel)
	Batch processing of images, including preference and tolerance profile customization.
	Monitors folders and processes incoming files without you lifting a finger or even being present. Up to four DICOM tags may be used to sort.
	All measurements can be tracked and plotted over time in the statistical trend database. Any number of databases can be used. All Statistical Process Control parameters measured and plotted.

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