



CIT CR Phantom

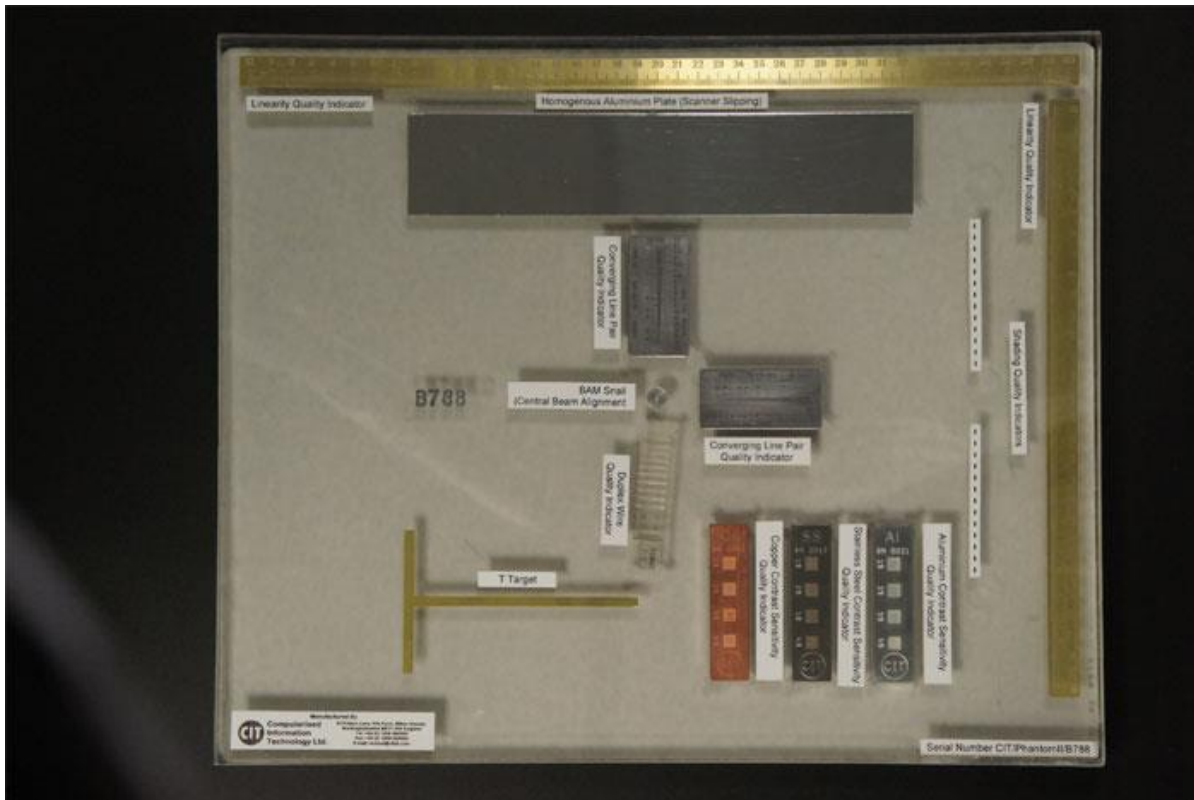
For Radiographic System Qualification

The need for Quality Control is emphasized throughout any production system. Measurement and traceability of equipment performance and assurance of repeatability and accuracy are paramount in establishing correct working practices. Checking the performance of a Radiographic System for Quality Assurance purposes has historically been an arduous task, with differing standards and multiple test gauges and exposures.

CIT's CR Test Phantom incorporates the required test elements in a single simple-to-use unit, allowing the evaluation of Computed Radiography (CR) systems, for individual radiography in accordance with ASTM and EN International Radiographic Testing Standards, as well as monitoring the quality of the chosen system.

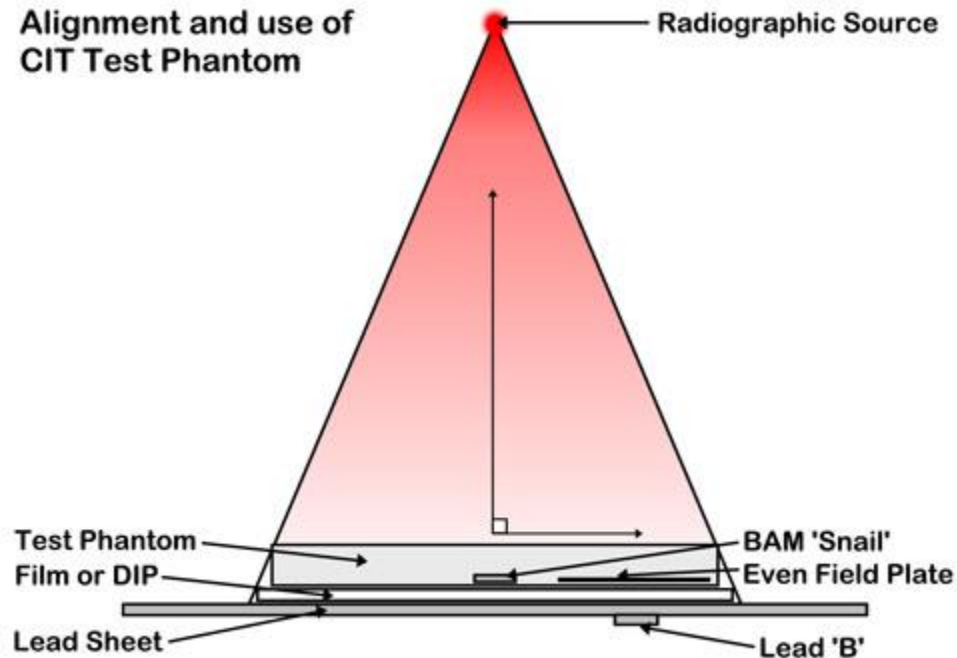
The regular use of the CR Test Phantom will assure the long-term stability performance measurements of the CR system over the life-cycle of the devices.

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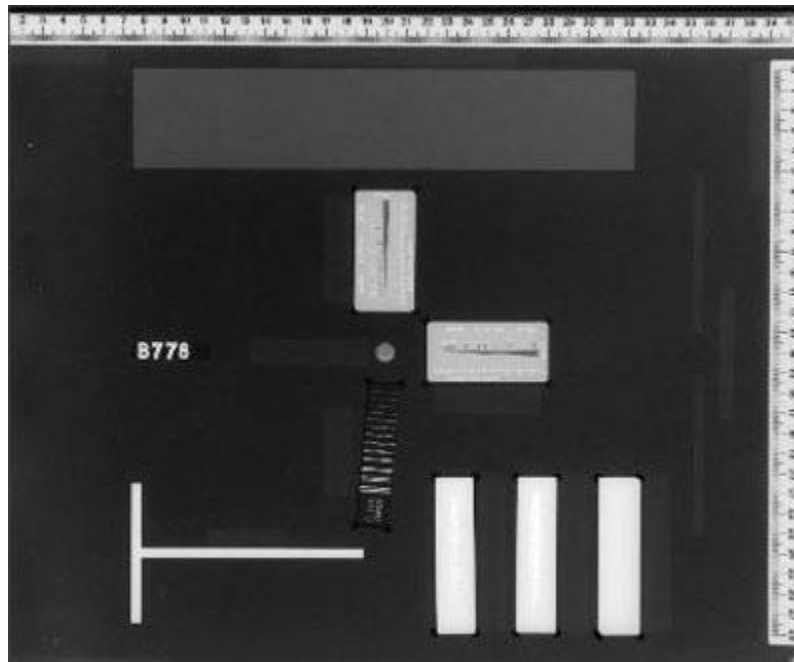


CR Phantom II Test Kit

Alignment and use of CIT Test Phantom



Alignment & Usage



Basic Radiographic Measurement Performance

There are several factors affecting the quality of a CR image, including the spatial resolution of the IP system, geometrical un-sharpness, scatter and contrast sensitivity (signal / noise ratio). There are several additional factors, for example scanning parameters, that affect the accurate reading of displayed digital images.

The CR Phantom provides these quality indicators for measuring:

- Shading
- Spatial resolution
- Central beam alignment
- Converging Gauge – 20 Lp/M
- Radiograph Set-up un-sharpness
- MTF
- Jitter
- Linearity
- Slipping
- Contrast sensitivity

CIT CR Phantom comes in two sizes: 8" x 10" and 14" x 17"

The CIT CR Test Phantom is designed to fully comply with these requirements:

- ASTM E2445-05 Appendix X!
- EN 14784-1:2005
- ASTM E2002 / EN462-5
- ASTM 1647-98a
- BSS 7043

Includes the following calibration devices:

- T-Target for laser jitter test and MTF Measurements
- Duplex IQI according to EN462-5
- Central Beam Alignment (BAM Snail)
- Converging line pair quality indicator (20lp/mm)
- EL, EC, ER Measuring points Cassette positioning locator
- Homogenous strip
- Lucite plate for shading correction
- Inch / mm ruler for linearity check
- Contrast sensitivity quality indicator