

# **Nuclear Associates 07-653**

Fluoroscopic Imaging Test Phantom

**Users Manual** 

Fluke Biomedical Radiation Management Services

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# Section 1 General Information

#### 1.1 Parts

Phantom Base Assembly
Thin Clip-On Attenuator (X.X mm Cu)
Thick Clip-On Attenuator (Y.Y mm Cu)

## 1.2 Assembly

Pediatric patient simulation – phantom without attenuators

Small adults – phantom with thin clip-on attenuator

Larger adults – phantom with thick clip-on attenuator

Heavy adults - phantom with both clip-on attenuators

## 1.3 Measurement Setup

The image intensifier's grid is either in-place or removed in accordance with the clinical protocol being simulated.

CAUTION

The entrance surface of the image intensifier is fragile. Additional attention is required if the grid is removed.

Fasten the phantom to the entrance surface of the image intensifier. (In some cases, the clips on the phantom will engage slots on the image intensifier assembly.)

Set systems with variable source to image receptor instance (SID) to a standard value (e.g. 100 cm).

Remove extraneous material from the x-ray beam.

The tabletop and /or patient mattress may be in place if desired.

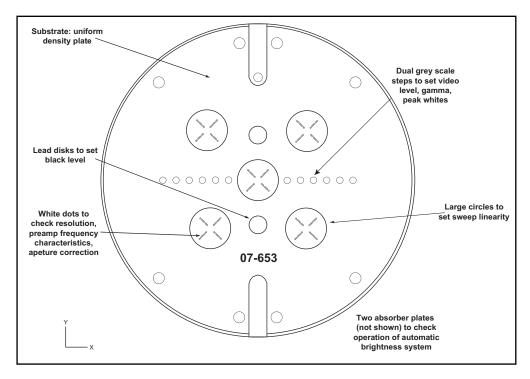


Figure 1-1.

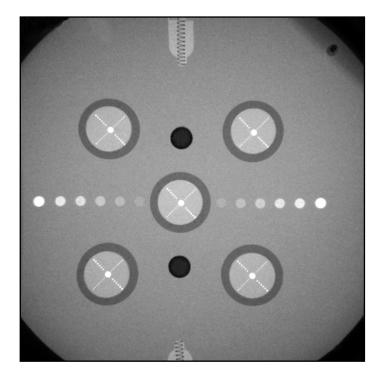


Figure 1-2.

The fluoroscopic Imaging Test Phantom provides a test pattern, enabling the precise adjustment of many critical parameters of the Fluoroscopic System.

### 1.4 Procedure

- Operate the system using fluoroscopic and acquisition modes under investigation.
- Note the electrical setting on the control panel (e.g. kV, mA, ms).
- Note the visibility of the small holes in each of the five cross targets.
- Note the visibility of the six steps in each of the two white targets.
- Note the visibility of the two lead (black) targets. These targets establish the black level for the system.
- Image analysis may be visual, video or digital.

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