

**FLUKE®**

**Biomedical**

# **Nuclear Associates 18-250**

**Digital Stereotactic Breast Biopsy Accreditation Phantom**

**Users Manual**

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**Fluke Biomedical  
Radiation Management Services**

6045 Cochran Road  
Cleveland, Ohio 44139  
440.498.2564

[www.flukebiomedical.com/rms](http://www.flukebiomedical.com/rms)

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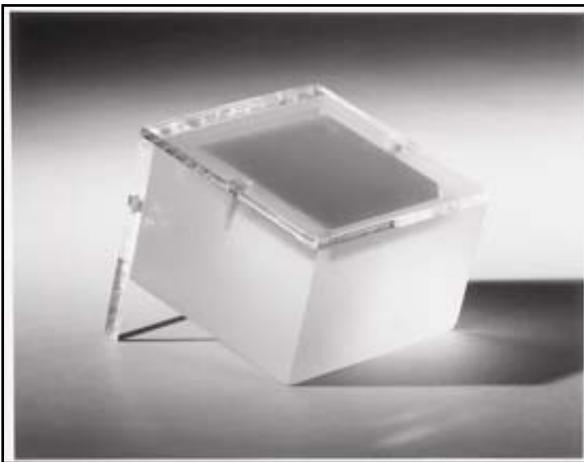
## Section 1

# General Information

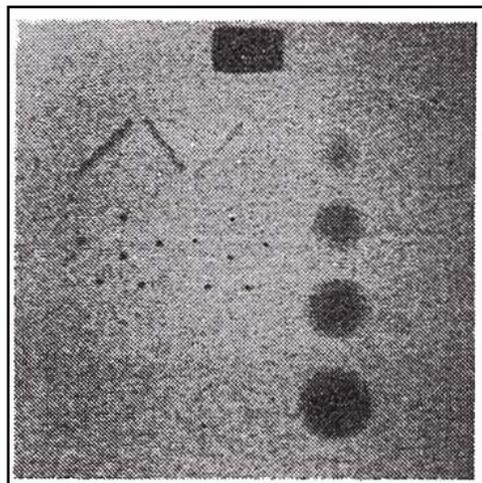
### 1.1 Introduction

#### Digital Mammography Evaluation Phantom, Model 18-250\*

- Provides an easy way to test image quality on digital biopsy mammography units **and qualify for ACR accreditation.**
- Contains the same objects that are embedded in the Mammographic Accreditation Phantom (Model 18-220), which is also specified by the ACR.
- Has an extended top edge that allows for easy positioning on recumbent biopsy units.
- Enables the user to determine if the images are similar to or better than screen film.
- Is fast, convenient and easy to use.



*Model 18-250. Digital Mammography Evaluation Phantom*

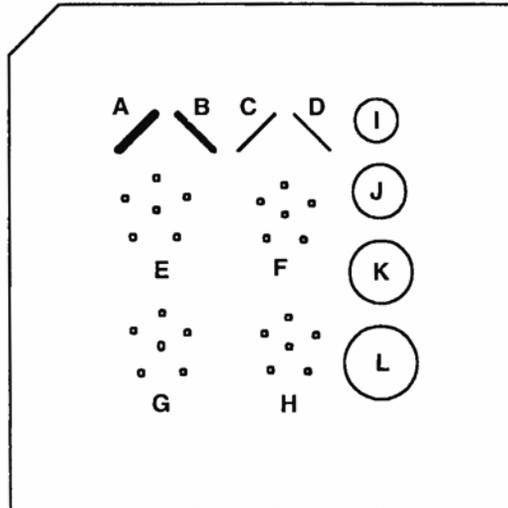


*Model 18-250. Digital Image Demonstrating Image Evaluation Insert*

\* Designed by Carol Mount, R.T. ® (M), and Joel E. Gray, Ph.D., Department of Diagnostic Radiology, Mayo Clinic, Rochester, MN 55905. Manufactured under licensing agreement with Mayo Foundation for Medical Education and Research.

## 1.2 Accreditation Images on Recumbent or Upright Digital Stereo Biopsy Units

1. Center the phantom at the chest wall edge of the image receptor. Place the compression paddle in contact with the phantom to secure it.
2. If phototiming is available, make a phototimed exposure.
3. If the unit does not have phototiming, manually select the kVp and mAs routinely used to radiograph the Mammographic Accreditation Phantom (Model 18-220).
4. Make the exposure.
5. Analyze the image on the monitor.
6. To pass accreditation with the Digital Mammography Evaluation Phantom, you must be able to see 3 fibers, 3 groups of specks, and 2.5 masses.
7. Record your image on disk or film.
8. In accordance with the American College of Radiology, this test should be done weekly.



*Wax Insert*

### **Fibers**

- A. 0.93 mm nylon fiber
- B. 0.74 mm nylon fiber
- C. 0.54 mm nylon fiber
- D. 0.32 mm nylon fiber

### **Specks**

- E. 0.54 mm speck
- F. 0.32 mm speck
- G. 0.24 mm speck
- H. 0.20 mm speck

### **Masses**

- I. 0.25 mm (thickness) mass
- J. 0.50 mm (thickness) mass
- K. 0.75 mm (thickness) mass
- L. 1.0 mm (thickness) mass

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