

# Mammographic Accreditation Phantom

*The required standard for image quality evaluations*

Meets MQSA requirements. The Mammographic Accreditation Phantom was designed to test the performance of a mammographic system by a quantitative evaluation of the system's ability to image small structures similar to those found clinically. Objects within the phantom simulate calcifications, fibrous calcifications in ducts, and tumor masses. The Phantom is designed to determine if your mammographic system can detect small structures that are important in the early detection of breast cancer. Test objects within the phantom range in size from those that should be visible on any system to objects that will be difficult to see even on the best mammographic systems.

The 4.4 cm thick Mammographic Phantom is made of a 7 mm wax block insert containing 16 sets of test objects, a 3.4 cm (approx. 1-



**Model 015**

3/8") thick acrylic base, and a 3 mm (1/8") thick cover. All of this together approximates a 4.2 cm compressed breast of average glandular /adipose composition. Included in the wax insert are aluminum oxide ( $Al_2O_3$ ) specks to simulate micro-calcifications. Six dif-

ferent size nylon fibers simulate fibrous structures and five different size lens shaped masses simulate tumors.

Phantom includes a 4 mm acrylic step wedge, operating instructions, faxitron x-ray image and magnifying lens.

# Model 015 Specifications

## WAX INSERT

### FIBERS

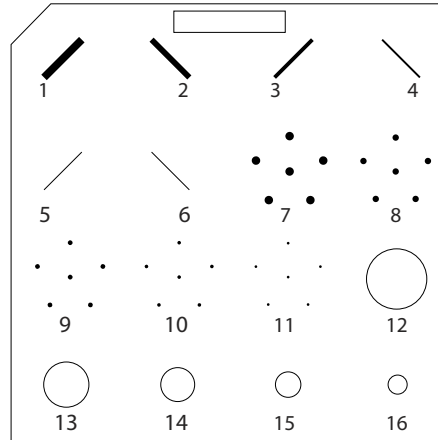
1. 1.56 mm nylon fiber
2. 1.12 mm nylon fiber
3. 0.89 mm nylon fiber
4. 0.75 mm nylon fiber
5. 0.54 mm nylon fiber
6. 0.40 mm nylon fiber

### SPECKS

7. 0.54 mm  $Al_2O_3$  speck
8. 0.40 mm  $Al_2O_3$  speck
9. 0.32 mm  $Al_2O_3$  speck
10. 0.24 mm  $Al_2O_3$  speck
11. 0.16 mm  $Al_2O_3$  speck

### MASSES

12. 2.00 mm (thickness) mass
13. 1.00 mm (thickness) mass
14. 0.75 mm (thickness) mass
15. 0.50 mm (thickness) mass
16. 0.25 mm (thickness) mass



## PHANTOM BODY

- MATERIAL: ACRYLIC  
 LENGTH: 10.8 CM  
 WIDTH: 10.15 CM  
 DEPTH: 4.4 CM

