

# Mammography Phototimer Consistency Testing Slabs

Model 014A



## ***BETTER THAN PMMA FOR AEC CALIBRATION***

The American Cancer Society and American College of Radiology guidelines for the screening of asymptomatic women have made over 50 million women candidates for mammography. In light of the staggering numbers involved, it's critically important that simple but reliable methods be developed to assess system performance and assure consistent production of diagnostically useful images.

CIRS Phototimer Consistency Testing Slabs are designed for precise assessment of AEC system performance in accordance with American College of Radiology and MQSA recommendations. Unlike acrylic, these testing slabs are manufactured with very tight thickness tolerances and more accurately simulate real breast tissue over the range of energies used in mammography. BR-12 (47% glandular / 53% adipose) is most commonly used.

### ***Features***

- Assess AEC system performance
- Comply with ACR & MQSA recommendations
- Available in multiple configurations

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**CIRS**

Tissue Simulation & Phantom Technology

# SPECIFICATIONS

## MAMMOGRAPHY PHOTOTIMER CONSISTENCY TESTING SLABS

MODEL NO.	STANDARD GLANDULARITY	QUANTITY	LENGTH (CM)	WIDTH (CM)	THICKNESS (CM)
014A	BR12	3	12.5	10	2
		2	12.5	10	1
		1	12.5	10	0.5

## PHOTOTIMER COMPENSATION PLATE

- **Contrast Stepwedge (5 mm thickness)**

1. Adipose tissue
2. Glandular tissue

- **Hemispheric Masses 75% Glandular Tissue Thickness (mm)**

3. 3.16
4. 2.38
5. 1.98
6. 1.59
7. 1.19
8. 0.90

- **Specs**

- **Calcium Carbonate (mm)**

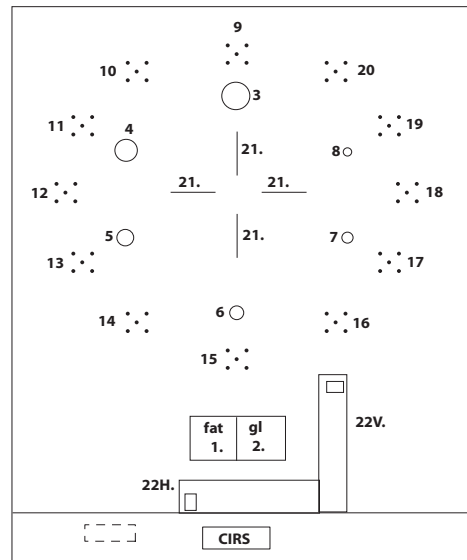
9. 0.39
10. 0.27
11. 0.23
12. 0.20
13. 0.16
14. 0.13

- **Alumina (mm)**

15. 0.39
16. 0.27
17. 0.23
18. 0.20
19. 0.16
20. 0.13

- **Fibril**

21. Diameter = 25 Microns High Contrast
22. Line pair test target



### References:

White, D.R., R.J. Martin, and R. Darlison, Epoxy resin based tissue substitutes, British Journal of Radiology, 5, 814-821, 1977.

Materials are formulated to maximize simulation properties at 20 keV for the mammographic range, 80 keV for the diagnostic range and 0.5 MeV and above for the therapeutic range.

