

# Ultrasound Phantoms for 2D & 3D Evaluation

Models 055 & 055A



## Designed for Compliance with AIUM Standards

- Perform spatial measurement system checks according to published AIUM standard
- Ensure over ten years of reliable use through reinspection and repair services

***Includes best in industry four-year warranty***

The CIRS Model 055 3D Ultrasound Calibration Phantom and 055A 3D Wire Test Object, may be used to perform the following tests of the accuracy of spatial measurements, which is especially for 3-D and 4-D ultrasound systems equipped with spatial encoding algorithms.

In the Model 055, these tests are performed with the aid of three volumetric targets, while in the Model 055A they are performed using wire targets. The phantoms can also be used to perform Image uniformity and depth of penetration tests.

Both phantoms are made of CIRS, proprietary Zerdine® hydrogel polymer, which has been formulated to provide tissue mimicking properties including compatibility with harmonic imaging. To maximize phantom lifetime, this gel is contained in a rugged ABS plastic housing with a Saran-based laminate membrane.

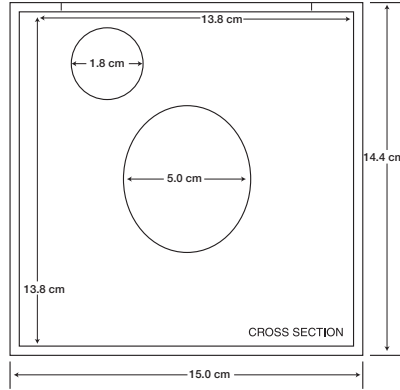
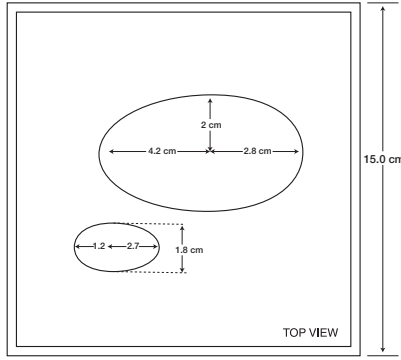
CIRS ultrasound QA phantoms come standard with a robust housing, carry case, 48-month warranty, and user guide.

## Key Tests with Models 055 & 055A

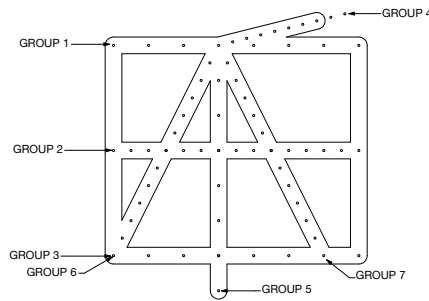
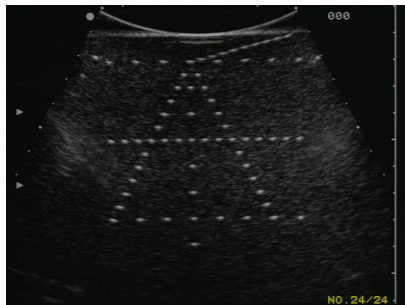
- Linear Distance
- Perimeter
- Area
- Surface Area
- Volume

This product is available through:

***JRT*** Associates 800-221-0111



Model 055



Model 055A

**SPECIFICATIONS**

**ZERDINE® PROPERTIES (BOTH PHANTOMS)**

Description: Solid elastic water-based polymer  
 Freezing point: 0° C  
 Melting point: Above 100° C  
 Speed of Sound: 1540 m/s  
 Other: Compatible with harmonic imaging

**MODEL 055**

**CONTAINER**  
 Dimensions: 15 x 15 x 15 cm  
 Material: ABS Housing

**SCAN WINDOWS**  
 Membranes: Saran-based laminate  
 Dimensions (Top): 12 cm x 12 cm  
 Dimensions (Side): 11 cm x 11 cm

**SMALL VOLUME**  
 Nominal Volume: 6.9 cc  
 Depth of target: 2.5 cm from top scanning surface  
 2 cm from side scanning surface  
 Appearance: Hyperechoic

**LARGE VOLUME**  
 Nominal Volume: 75 cc  
 Depth of target: 6 cm from top scanning surface  
 6 cm from side scanning surface  
 Appearance: Hyperechoic

**MODEL 055 INCLUDES**  
 3D Ultrasound Calibration Phantom  
 Carry Case  
 Certificate of Compliance  
 QA Worksheet  
 48-month Warranty

**MODEL 055A**

**CONTAINER**  
 Dimensions: 13 x 18 x 11 cm  
 Material: ABS Housing

**SCAN WINDOW**  
 Scanning Membrane: Saran-based laminate  
 Dimensions: 14 cm x 9 cm

**WIRE TARGETS**  
 Material: 0.1 mm Nylon Monofilament  
 Positions: See table below

GROUP	STARTING POSITION (X, Y)	SUBSEQUENT WIRE MOVES
1	(0 cm, 0 cm)	$\Delta x= 1 \text{ cm}, \Delta y= 0 \text{ cm}$
2	(0 cm, 4 cm)	$\Delta x= 0.5 \text{ cm}, \Delta y= 0 \text{ cm}$
3	(0 cm, 7 cm)	$\Delta x= 1 \text{ cm}, \Delta y= 0 \text{ cm}$
4	(3 cm, 0 cm)	$\Delta x= 0.4 \text{ cm}, \Delta y= -0.1 \text{ cm}$
5	(3 cm, 0 cm)	$\Delta x= 0 \text{ cm}, \Delta y= 1 \text{ cm}$
6	(3 cm, 0 cm)	$\Delta x= -0.25 \text{ cm}, \Delta y= 0.5 \text{ cm}$
7	(3 cm, 0 cm)	$\Delta x= 0.25 \text{ cm}, \Delta y= 0.5 \text{ cm}$

**MODEL 055A INCLUDES**  
 3D Wire Test Object Phantom  
 Removable water well  
 Removable endocavity cover  
 Removable storage cover  
 Carry Case  
 Certificate of Compliance  
 48-month Warranty

