General Purpose Ultrasound Phantom Model 054GS



The CIRS Model 054GS General Purpose Ultrasound Phantom contains gray scale targets and improved sensitivity targets that exceed the phantom requirements outlined in the ACR accreditation program.

The phantom is 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, rugged carry case, 48-month warranty and user's guide.

Exceed ACR Accreditation Requirements

- Test the full range of standard diagnostic ultrasound probes (2 MHz to18 MHz)
- Detachable water wells allow for testing curvilinear and endocavity probes
- Ensure over ten years of reliable use through reinspection and repair services

Includes best in industry four-year warranty

ZERDINE[®] Inside

Key Tests with Model 054GS

- Uniformity
- Depth of Penetration
- Beam Profile/ Focal Zone/ Lateral Response
 Width
- Vertical Distance Measurement
- Horizontal Distance Measurement
- Axial and Lateral Resolution
- Elevational Resolution
- Contrast Resolution
- Grayscale Contrast Sensitivity
- Dead Zone Assessment



GENERAL PURPOSE ULTRASOUND PHANTOM





Phantom includes detachable scanning wells and air tight case.

SPECIFICATIONS

DIMENSIONS:	17.8 cm x 12.7 cm x 20.3 cm
	(7" x 5" x 8")
PHANTOM WEIGHT:	11 lbs. (4.1 kg)
HOUSING MATERIALS:	ABS Plastic
MEMBRANE	Saran-based laminate
TISSUE-MIMICKING Material	Zerdine [®] solid elastic hydrogel

ZERDINE® PROPERTIES

Freezing point: Melting point: Speed of Sound: Other: 0° C Above 100° C 1540 m/s Compatible with harmonic imaging

VERTICAL DISTANCE GROUP

Number of targets: Wire diameter: Depth range: Spacing:

10 100-micron, nylon monofilament 1 to 18 cm 20 mm

HORIZONTAL DISTANCE GROUP

Number of groups: Wire: Depth: Spacing:

NEAR FIELD GROUP

Number of targets:6Wire Diameter:100 mDepth range:1 to 6Distance b/w Targets:1 mm

6 100 microns, nylon monofilament 1 to 6 mm 1 mm

MODEL 054GS INCLUDES

QTY	COMPONENT DESCRIPTION
1	General Purpose Ultrasound Phantom
1	Detachable Protective Cover
1	Detachable Water Well (1 cm deep)
1	Detachable Endocavity Well
1	Carry Case
-	48-Month Warranty
-	User Guide
-	Certificate of Compliance

4, 3, 2, 1, 0.5 & 0.25 mm 4, 3, 2, 1, 0.5 & 0.25 mm

AXIAL-LATERAL RESOLUTION GROUPS

Wire diameter: 80 microns

Group 1 Depth: Axial separation: Lateral separation:

Group 2 Depths: 11 cm Axial separation: 5, 4, 3, 2 & 1 mm Lateral separation: 5, 4, 3, 2 & 1 mm

3 cm

ANECHOIC CYLINDERS

Number of targets: 5 Diameter of targets: 8 mm Depth of Targets: 4, 7, 10, 13, & 16 cm Anechoic, Cyst-like

GRAY SCALE TARGETS

Number of targets: Contrast: Depth: Diameter:

6 -6 dB, -3 dB, +3 dB, +6 dB & hyperechoic (about 12 dB) with respect to background 4 cm 8 mm



Computerized Imaging Reference Systems, Inc. has been certified by UL DQS Inc. to **(ISO) 13485:2016**. Certificate Registration No.10000905-MP2016.

Model 054GS

Depth: Diamete

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GROUP 7 100-micron, nylon monofilament 9 cm

20 mm respectively