

Ultrasound Resolution Phantom

Model 044



Designed for Evaluating System Resolution

- Unique dual attenuation design allows testing on low frequency abdominal probes up to 5 MHz and high frequency probes to 15 MHz and higher
- Detachable water wells allow for testing curvilinear and endocavity probes
- Single units and sets with custom modulus values are available upon request
- Ensure over ten years of reliable use through reinspection and repair services

Includes best in industry four-year warranty

ZERDINE® Inside
A registered trademark of CIRSS

Due to the nature of sound wave propagation in tissue, all ultrasound systems must make a trade-off between resolution and depth of penetration. Higher frequency transducers provide greater resolution at the cost of depth of penetration, while lower frequency transducers sacrifice resolution for a larger field of view. The Model 044 provides an ideal platform for assessing the combination of depth of penetration and resolution using targets that combine axial, lateral and elevational resolution into a single parameter known as “effective resolution.”

To measure effective resolution, the Model 044 provides resolution and contrast targets over a series of depths.

The phantom is constructed from the patented solid elastic material, Zerdine^{®(1)} and is housed in a rugged ABS casing. Zerdine accurately simulates the ultrasound characteristics of human liver tissue.

The phantom includes a carry case, certificate of compliance, user guide and 48-month warranty.

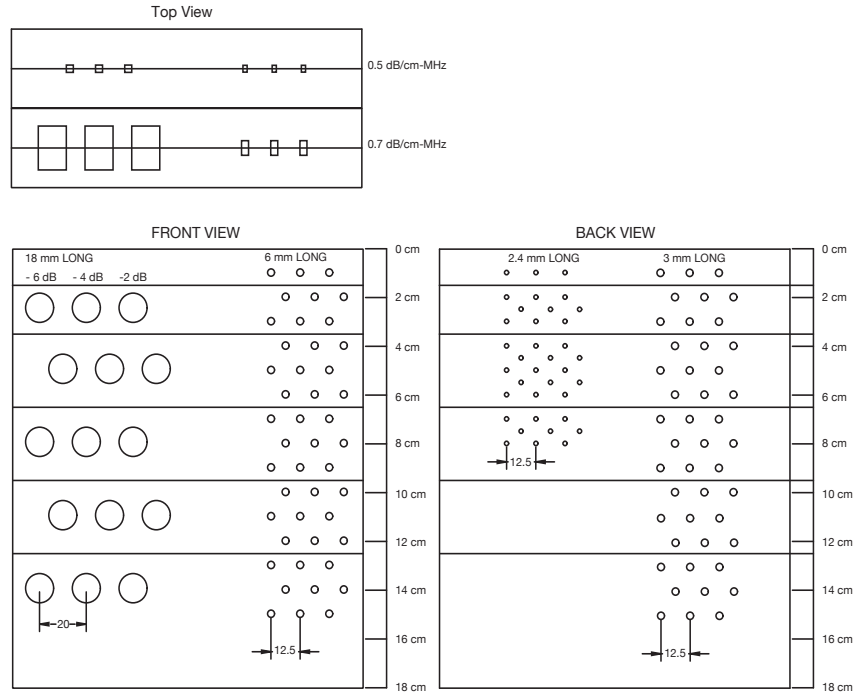
Routine Quality Control Measurements with Model 044

- Uniformity
- Depth of Penetration
- Vertical and Horizontal Distance

(1)US PATENT# 5196343

CIRSS

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Embedded Target Layout

SPECIFICATIONS

DIMENSIONS	18 cm x 13 cm x 20 cm
PHANTOM WEIGHT	11 lbs. (5 kg)
HOUSING MATERIALS	ABS Plastic
MEMBRANE	Saran-based laminate
TISSUE-MIMICKING MATERIAL	Zerdine® solid elastic hydrogel

MODEL 044 INCLUDES

QTY	COMPONENT DESCRIPTION
1	Ultrasound Resolution Phantom
1	Carry Case
1	Removable Scanning Well
1	Removable Endocavity Well
1	Removable Cover
-	48-Month Warranty
-	User Guide
-	Certificate of Compliance

ZERDINE® PROPERTIES

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

LOW CONTRAST CYLINDERS

Length: 18 mm
 Diameter: 12 mm
 Targets per group: 15
 Contrast: -2 dB, -4 dB and -6d dB

HIGH CONTRAST CYLINDERS (LARGE)

Length: 6 mm
 Diameter: 3 mm
 Targets per group: 45
 Contrast: Anechoic

HIGH CONTRAST CYLINDERS (MEDIUM)

Length: 3 mm
 Diameter: 1.5 mm
 Targets per group: 45
 Contrast: Anechoic

HIGH CONTRAST CYLINDERS (SMALL)

Length: 2.4 mm
 Diameter: 3 mm
 Targets per group: 36
 Contrast: Anechoic

ALIGNMENTS

Material: Nylon monofilament
 Diameter: 0.5 mm
 Depths: 1.5, 3.5, 6.5, 9.5 & 12 cm

