

# 3D Calibration Phantom

Model ATS 560H



The Model 560H rubber-based, tissue-mimicking (TM) phantom provides a basic means of evaluating an imaging system's performance along with its 3D volumetric measurements.

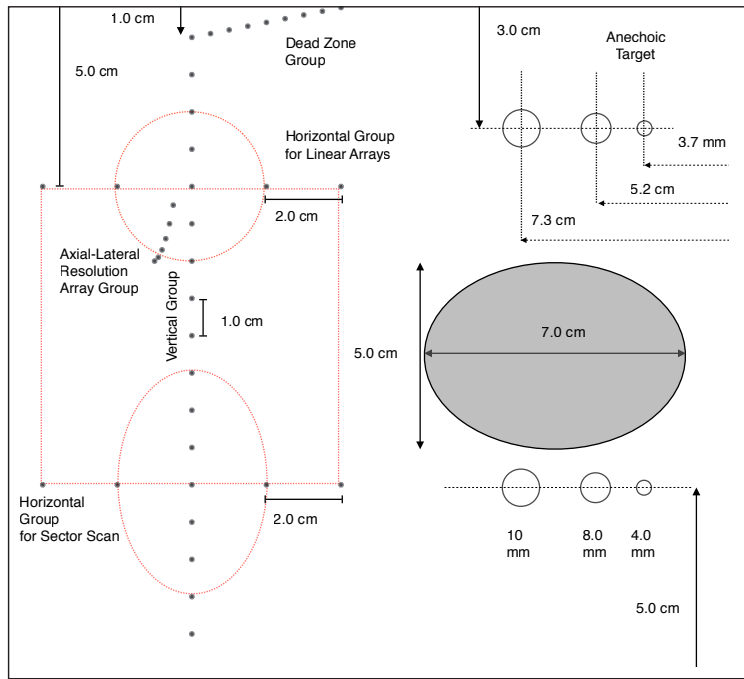
The phantom combines monofilament line targets, six non-echogenic cylindrical targets of varying sizes and a 3D egg-shaped target structure. The monofilament targets have a diameter of 0.12 mm and are arranged in four groups of line targets to evaluate the vertical and horizontal calibration measurements, axial-lateral resolution and the dead zone. All ATS urethane phantoms are guaranteed for the useful life of the phantom, defined as 10 years.

## Key Tests with Model ATS 560H

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

# CIRS

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SPECIFICATIONS

<b>DIMENSIONS</b>	23.4 x 20.5 x 9.5cm (9" x 8" x 4")
<b>PHANTOM WEIGHT</b>	7 lbs. (3.1 kg)
<b>HOUSING MATERIALS</b>	PVC
<b>SCAN SURFACES</b>	4
<b>SCAN SURFACES DIMENSIONS</b>	17 x 8 cm 19 x 8 cm
<b>TISSUE-MIMICKING MATERIAL</b>	Urethane Rubber

MODEL ATS 560H INCLUDES

QTY	COMPONENT DESCRIPTION
1	3D Calibration Phantom
-	10-Year Warranty
-	User Guide
-	Certificate of Compliance

URETHANE PROPERTIES

Freezing point: < -40°C  
 Melting point: Above 100° C  
 Speed of Sound: 1450 m/s at 23°  
 Attenuation Coefficient: 0.5 dB/cm/MHz (measured at 3.5 MHz)

LINE TARGETS

Material: Monofilament nylon  
 Diameter: 0.12 mm

VERTICAL DISTANCE GROUP

Number of targets: 17  
 Depth range: 1.0 - 18.0 cm  
 Spacing: 1 cm

HORIZONTAL DISTANCE GROUP

Number of groups: 2  
 Depths: 5 cm from Scanning Surface #1  
 5 cm from Scanning Surface #3  
 Number of Targets: 10  
 Spacing: 2 cm

DEAD ZONE GROUP

Number of targets: 9  
 Lateral Displacement: 5 mm  
 Depth range: 2.0 - 10.0 mm  
 Spacing: 1 mm

AXIAL-LATERAL RESOLUTION GROUPS

Number of targets: 6  
 Lateral Displacement: 1 mm  
 Spacing: 5.0, 4.0, 3.0, 2.0, 1.0 mm  
 Axial Depth: 5.5 & 12.5 cm  
 Lateral Depth: 5.5 & 14 cm

ANECHOIC STEPPED CYLINDERS

Type: Non-echogenic, cylindrical  
 Number of targets: 6  
 Diameter: 4.0, 8.0, 10.0 mm  
 Spacing: 1.0 cm  
 Depth: 3.0, 5.0, 12.0, 15.0 cm

3D EGG TEST OBJECT

Type: Echogenic 3D ellipsoid  
 Major axis: 7.0 cm  
 Minor axis: 5.0 cm  
 Volume: 91.6 cm<sup>3</sup>

