Diagnostic Radiology | Test Tools

**112B Focal Spot Test Tool**

The focal spot size of an x-ray tube is of crucial importance in determining the detail of an x-ray image. The Focal Spot Test Tool was developed to allow easy and accurate interpretation of the effective focal spot size of radiographic x-ray tubes. The Model 112B consists of a metal target with twelve bar pattern groups. Each group consists of six slots with three slots perpendicular to the other three. The sizes and spacing of the slots in the 12 groups decrease by steps of 16% from 0.84 LP/mm to 5.66 LP/mm. The test pattern is mounted in the center of an acrylic disc 7.6 cm in diameter that contains a lead shield. The Model 112B is easier to interpret than the pinhole image or a star pattern for effective focal spot measurements.

**Specifications**

Construction: .......... acrylic cylinder, 3 in dia., with 12 group bar pattern target
Resolution: .......... 0.84 – 5.66 LP/mm
Dimensions: .......... 16.5 cm long, 7.6 cm dia. (6.5 x 3 in)
Weight: .......... 329 g (11.6 oz)

**117 Radiographic Aluminum Step Wedge**

This step wedge is constructed of homogeneous, high-purity aluminum and is designed to provide incremental exposures to x-ray film by the increased aluminum thicknesses in each step. The Model 117 provides a useful means of comparing the characteristic curve of various film-screen combinations, mAs reciprocity and, if done very carefully, sensitometry. For sensitometry totally independent of x-ray generator variations, use a dedicated sensitometer/densitometer.

**Specifications**

Construction: .......... high-purity aluminum alloy, 11 steps 3 mm high x 12.7 mm deep
Dimensions: .......... 6 x 14 cm (2.4 x 5.5 in)
Weight: .......... 461 g (1 lb)

**118 Mammographic Aluminum Step Wedge**

Constructed of homogeneous, high purity aluminum, this step wedge provides incremental exposures to mammographic x-ray film by the increased aluminum thicknesses in each step. The step wedge provides a useful means of comparing the characteristic curve of various film-screen combinations, mAs reciprocity, and, when carefully performed, sensitometry. For sensitometry totally independent of x-ray generator variations, use a dedicated sensitometer/densitometer.

**Specifications**

Construction: .......... high-purity aluminum and copper alloy, 9 steps 0.25 cm high and 1.4 cm deep
Size: .......... 14.2 x 4 cm (5.6 x 1.9 in)
Weight: .......... 10 g (0.4 oz)