

NEMA PET Scatter Phantom™ NEMA PET Sensitivity Phantom™

NEMA PET Scatter Phantom™ Model PET/NEMA-SCT/P

Main Features:

- The NEMA Scatter Phantom™ is designed in accordance with the recommendations by the National Electrical manufacturers Association (NEMA) to standardize the measurement of count rate performance of a scintillation camera in the presence of scatter*
- Is a solid right circular high density polyethylene cylinder
- Has a fillable line source holder parallel to the center axis of the cylinder and offset a distance O.D. 4.5 cm
- The cylinder is made of four sections for ease of carrying/storage

Main Applications:

- Acceptance testing with NEMA standard
- Determine the imaging systems relative sensitivity to scatter radiation
- Measure the effects of dead-time and the effects of random events generated at different levels of activity of the line source



NEMA PET Scatter Phantom™

Specifications:

Outside diameter: 203 cm
Length: 70 cm
Hole size: 6.4 mm
Offset distance: 4.5 cm

Line source insert:

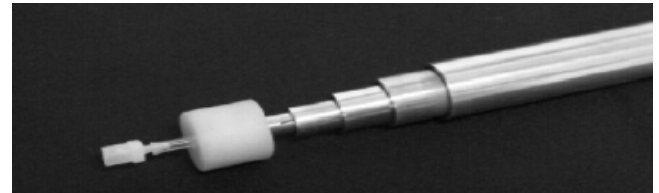
Length: 80 cm
Inside diameter: 3.2 mm
Outside diameter: 5 mm

NEMA PET Sensitivity Phantom™ Model PET/NEMA-SEN/P

- 6 Concentric aluminum tubes used to detect camera sensitivity in PET

Specifications:

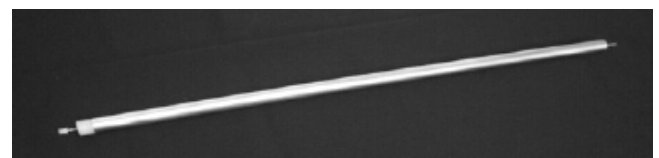
5 internally stacked aluminum tubes all 700 mm in length
1st Tube inside diameter 3.9 mm, outside diameter 6.4 mm
2nd Tube inside diameter 7.0 mm, outside diameter 9.5 mm
3rd Tube inside diameter 10.2 mm, outside diameter 12.7 mm
4th Tube inside diameter 13.4 mm, outside diameter 15.9 mm
5th Tube inside diameter 16.6 mm, outside diameter 19.1 mm
The innermost tube, a fillable polyethylene tubing has an inside diameter of 1 mm, outside diameter 3 mm



Close up end of NEMA PET Sensitivity Phantom™



Set of aluminum tubes used in NEMA PET Sensitivity Phantom™



NEMA Sensitivity PET Phantom™

* *Performance Measurements of Scintillation Cameras*, NEMA Standards Publication No. NU2, National Electrical Manufacturers Association (NEMA), Washington, D.C., 2001