

Pro-NM Performance



08-101 - standard version
08-103 - version with the PET Lid



The phantom for NM and PET systems performance evaluation (collimator, artifacts, calibration, reconstruction parameters). It can be used to evaluate, for example: center-of-rotation error, non-uniformity artifacts, changes of radius-of-rotation on spatial resolution, reconstruction filters on spatial resolution, attenuation and scatter compensation.

Technical data (can be modified to customer specifications):

- main cylinder:
 - inside cylinder diameter: 206 mm
 - inside cylinder height: 186 mm
 - cylinder wall thickness: 7 mm
- cold rods insert:
 - rod diameters: 4.8, 6.4, 7.9, 9.5, 11.1 and 12.7 mm
 - height of rods: 88 mm
- cold spheres:
 - solid sphere diameters: 9.5, 12.7, 15.9, 19.1, 25.4 and 31.8 mm
 - height of the center of the spheres from the base plate: 127 mm
- optional PET Lid with cylindrical samples (08-102):
 - refillable thin-walled cylinders, diameters: 8, 12, 16 and 25 mm
 - water filled cylinder diameter: 25 mm
 - air filled cylinder diameter: 25 mm
 - PTFE solid cylinder diameter: 25 mm
 - cylinder height: 38 mm
- optional heavy duty carrying case (08-110)

Product features:

- Complies with:
 - NEMA Standards Publication (NU 1-2001) Performance Measurements of Scintillation Cameras
 - AAPM Report No. 9 - Computer Aided Scintillation Camera Acceptance Testing
 - AAPM Report No. 22 - Rotating Scintillation Camera SPECT Acceptance Testing and Quality Control
 - ACR-SNM (Res. 5 – 2011) technical standard for diagnostic procedures using radiopharmaceuticals
- CE certified
- the Manual provides detailed guidelines for carrying out each test, results assessment and registration

Pro-NM Linear Source Module

08-201



This module can be used as a standalone in air or in water if mounted in the Pro-NM Performance cylinder. It can be used to evaluate changes of radius-of rotation on spatial resolution, spatial resolution measurement in air and in water, quantitative evaluation of reconstruction filters and scatter compensation methods.

Technical data (can be modified to customer specifications):

- insert diameter: 186 mm
- diameter of line sources: 1 mm
- spacing of line sources: 75 mm
- useful height of line sources: 70 mm
- stopcocks with luer connection allow easy and safe filling and draining of line sources

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