Pro-NM NEMA NU2

08-105

The phantom for evaluating performance of positron emission tomographs (PET). Recommended for use in the evaluation of reconstructed image quality in whole body PET imaging. **For simulation of whole-body imaging especially using PET and camera-based coincidence imaging techniques**.

Can also be used for determination of the coincidence count rate characteristics in brain and cardiac imaging, evaluation of the relationship between true coincidence count rate and radioactivity, determination of the address errors caused by address pile up, evaluation of the count loss correction scheme.

It has been designed in accordance with the recommendations by the International Electrotechnical Commission (IEC) and modified by the National Electrical manufacturers Association (NEMA).

Technical data (can be modified to customer specifications):

- interior length of the phantom: 180 mm
- volume of empty cylinder: 9.7 liters
- 6 fillable spheres:
  - inner diameter: 10 mm, 13 mm, 17 mm, 22 mm, 28 mm, and 37 mm
  - distance from sphere plane to inside wall: 70 mm
- cylindrical insert dimension:
  - outside diameter: 51 mm
  - length: 180 mm
- optional heavy duty carrying case (08-110)

Product features:

- Complies with:
  - International Standard: Radionuclide imaging devices – Characteristics and test conditions – Part 1: Positron emission tomographs, International Electrotechnical Commission (IEC), 61675-1, Geneva, Switzerland, 1998.
  - Performance Measurements of Scintillation Cameras, NEMA Standards Publication No. NU2, National Electrical Manufacturers Association (NEMA), Washington, D.C., 2001.
  - NEMA2007/IEC2008
  - NEMA 2012/IEC 2008
- the Manual provides detailed guidelines for carrying out each test, results assessment and registration