

RADIOACTIVE SOURCES

Models 3150A and 4250A are Radon Field Check Sources

These are reference sources for the calibration of Pylon AB-5 and AB-4 Portable Radiation Monitors and all other types of Radon instrumentation products that use standard Lucas type cells. Both the 3150A and the 4250A Model from Pylon boast fast operation for accurate instrument alignment and calibration. Each is a stable reference independent of environmental conditions.

Applications:

- Determine operating points on monitors
- Determine precise efficiency of Lucas type cell and PMT detector
- Scintillation check source used to verify operation of monitors

Features:

- Accurate calibration of Radon detectors
- High efficiency scintillation cells, counting characteristics of typical Radon gas samples permits accurate instrument alignment and calibration
- Stable reference independent of environmental conditions
- Fast operation
- Easy to use



4250A & 3150A

Theory of Operation:

The unit comprises a source of radon gas (Rn-222) sealed within high efficiency scintillation cell. Efficiency is $74.5 \pm 2\%$ when used with the Pylon AB-5 or AB-4. It reproduces the counting characteristics of a typical gas sample such as plateau shape and count rate, thus permitting accurate instrument alignment and calibration. A calibration certificate is supplied stating the total alpha activity and accurate to $\pm 4\%$. No radioactive material leaves the 3150A or 4250A. The 3150A model is equivalent in size and shape to Pylon model 300A cell. The 4250A model is equivalent in size and shape to the model CPC cell.



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Specifications:

	<u>3150A</u>	<u>4250A</u>
Parent nuclide:	Ra-226	Ra-226
Nominal activity:	3000	3000 dpm
Activity Tolerance:	-10 / +25	-10 / +25 %
Calibration accuracy:	± 4	± 4 % At a 1 σ Confidence Level.
Housing Material:	Aluminum	Aluminum
Scintillator:	ZnS(Ag)	ZnS(Ag)
Operating Temperature Range:	0 to +50 (+32 to +122)	0 to +50 °C (+32 to +122)(°F)
Storage Temperature Range:	-20 to +75 (-4 to +167)	-20 to +75 °C (-4 to +167) (°F)
Relative Humidity Range:	0 to 90	0 to 90 %
Diameter:	5.9 (2.3)	5.9 (2.3) cm (in.)
Height:	14.9 (5.9)	15 (5.9) cm (in.)
Weight:	215 (0.47)	240 (0.53) g (lb.)

- Values are nominal.

Ordering Information:

<i>Model</i>	<i>Part Number</i>	<i>Description</i>
3150A	A203552	Radon field check source for AB-5
4250A	629710	Radon field check source for AB-4

THESE SOURCES CONTAIN RADIOACTIVE MATERIALS. PYLON REQUIRES A COPY OF THE USER'S RADIOISOTOPE LICENCE PRIOR TO SHIPPING THESE PRODUCTS.

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