

ORNL INSTRUMENT EVALUATION SUMMARY

Ludlum Extendable Probe 44-9-18

Description: The Ludlum Extendable Probe, model 44-9-18, is a pancake G-M with an extendable/flexible handle used for beta/gamma detection.

Ranges Tested: N/A

Report Date: March 25, 2003

General Comments:

1. Confidence intervals used to ascertain whether results are conclusive or inconclusive are determined using the 0.95 quantile of the student's t distribution (95% confidence interval).

RADIATION RESPONSE

Probe Surface Sensitivity: Not performed.

Energy Response: Not performed.

Response Linearity: Not performed.

ELECTRONIC and MECHANICAL REQUIREMENTS and TESTS

Line Noise: Not performed.

Power Line Variations: Not performed.

Conducted Radio Frequency: Not performed.

INTERFERING RESPONSES TEST RESULTS

Radio Frequency/Microwave: Not performed.

Electric Fields: Not performed.

Magnetic Fields: Not performed.

Interfering Ionizing Radiations: Not performed.

ENVIRONMENTAL FACTORS

Temperature: Susceptibilities were observed over the temperature test range of -10 to 50 °C (+14 to +122 °F). Specific results are available in the test report.

Temperature Shock: Susceptibilities were observed when exposed to rapid temperature changes from 22 to -10, -10 to 22, 22 to 50, and 50 to 22 (in °C). Each change was performed within five minutes. Specific results are available in the test report.

Humidity: Susceptibilities were observed when exposed to a relative humidity level of 95% (non-condensing). Specific results are available in the test report.

Vibration: Not performed.