

SCOPE OF ACCREDITATION TO
ISO 17025:2005
HEALTH PHYSICS SOCIETY

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CALIBRATION OF SURVEY INSTRUMENTS & ION CHAMBERS

Valid To: January 1, 2011

Certificate Number: C2007-01

In recognition of the successful completion of the HPS evaluation process, accreditation is granted to this laboratory to perform the following calibrations:

Parameter/Equipment	Range	Best Uncertainty ^{1,2} (±)	Comments
Ionization Chambers – Health Physics Standards			
Co ⁶⁰ air kerma	30 to 1,000 mGy min ⁻¹	1.6%	Reference class and field class detectors
Cs ¹³⁷ air kerma	5 to 120 mGy min ⁻¹	1.6%	
X-Rays			
30–250 kVp M series	0.3 to 200 mGy min ⁻¹	1.2%	
40–250 kVp ISO narrow spectrum series	6 to 1,000 µGy min ⁻¹	1.2%	
Radiation Protection Survey Instruments			
Cs ¹³⁷ air kerma	5 µGy h ⁻¹ to 8 Gy h ⁻¹	7.8%	Geiger-Mueller tubes, scintillation detectors, semiconductor detectors ion chambers
X-Rays			
30–250 kVp M series	10 to 3,000 mGy h ⁻¹	7.8%	
40-250 kVp ISO narrow spectrum series	0.4 to 60 mGy h ⁻¹	7.8%	
Environmental Survey Instruments			
Cs ¹³⁷ Air Kerma	0.4 µGy h ⁻¹ to 5 µGy h ⁻¹	11 %	Geiger-Mueller tubes, scintillation detectors, semiconductor detectors, ionization chambers

¹ Uncertainties represent expanded uncertainties using a coverage factor of k = 2 which provides a level of confidence of approximately 95%

² “Best uncertainty” is used to alert the user to the fact that the measurement uncertainty is dependent on the precision and reproducibility of the instrument submitted for calibration.