

ISO 11665-3:2012-07 (E)

Measurement of radioactivity in the environment - Air: radon-222 - Part 3: Spot measurement method of the potential alpha energy concentration of its short-lived decay products

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms, definitions and symbols	1
3.1	Terms and definitions	1
3.2	Symbols	2
4	Principle of the measurement method	3
5	Equipment	3
6	Sampling	4
6.1	General	4
6.2	Sampling objective	4
6.3	Sampling characteristics	4
6.4	Sampling conditions	5
7	Detection method	5
8	Measurement	5
8.1	Procedure	5
8.2	Influence quantities	6
8.3	Calibration	6
9	Expression of results	7
9.1	General	7
9.2	Potential alpha energy concentration	7
9.3	Standard uncertainty	7
9.4	Decision threshold	8
9.5	Detection limit	8
9.6	Limits of the confidence interval	9
10	Test report	9
Annex A (informative) Examples of gross alpha counting protocols		11
Annex B (informative) Calculation of the coefficients k_{j218Po} , k_{j214Pb} , and k_{j214Bi} ,		12
Annex C (informative) Measurement method using gross alpha counting according to the Thomas protocol		16
Bibliography		19