
Atomic absorption spectrometer systems for measuring
metal pollutants

Part 3: Test report format

Systèmes de spectromètres d'absorption atomique pour la mesure des polluants
métalliques

Partie 3: Format du rapport d'essais



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Foreword

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**Atomic absorption spectrometer systems
for measuring metal pollutants.**

**Part 3: Test report format
(Mandatory)**

1 Introduction

- 1.1 R 100-1:2013 and R 100-2:2013 provide requirements for defining, testing and verifying the performance of atomic absorption spectrometer (AAS) systems when used for measurements of metal pollutants in water as mandated by national laws and regulations.
- 1.2 This test report is mandatory in the context of the OIML Certificate System, but may also be used for other purposes. It shall include the information below.

2 Report

Report no.: _____

2.1 Name and address of the testing laboratory or laboratories:

2.2 Location at which the tests were performed (if other than indicated in 2.1):

2.3 Name and address of the manufacturer:

2.4 Name and address of the applicant (if other than the manufacturer):

2.5 Identification of the system (type) tested:

Spectrometer type:

Flame AAS:

Furnace AAS:

Trade name:

Model number:

Serial number:

Date of manufacture:

Requirements for voltage:

frequency:

current:

2.6 Review of the operating manual:

Acceptable:

Deficient:

Comments:

2.7 Markings:

Pass:

Fail:

Comments:

2.8 Summary of the tests carried out (according to clause 5 of R 100-1:2013 and to R 100-2:2013)

2.8.1 Conditions of testing

Ambient temperature:

Relative humidity:

Nebulizer type:

Carrier gas-oxidant:

Light source:

Optical system:

Single beam:

Double beam:

Background correction: Yes: No: Type: _____

Data handling system: _____

Comments: _____

2.8.2 Characteristic concentration (or mass)

Wavelength setting: _____

Reference standard sample concentration ↓	Absorbance value

Interpolated concentration for an absorbance of 0.1: _____

Characteristic concentration or mass: _____

Pass: Fail:

Comments: _____

2.8.3 Repeatability

Wavelength setting: _____

Reference standard solution concentration: _____

Measurement repetition ↓	Measurement value ↓
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
\bar{X}	
s_r	

s_r _____ S _____

Pass:

Fail:

Comments:

2.8.4 IDL

Wavelength setting: _____

Blank test solution: _____

Measurement repetition ↓	Measurement value ↓
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
\bar{X}	
s	

Overall standard deviation, s : _____

IDL: _____

Pass: Fail: Comments:

2.8.5 Working range

Wavelength setting: _____

Measurement repetition	Measurement concentration				
	1	2	3	4	5
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
\bar{X}					
s_r					

r^2 : _____

Pass:

Fail:

Comments:

2.9 Conclusions

Brief statement of conclusions as to whether the AAS system tested meets the requirements of R 100-1:2013:

2.10 Person(s) responsible for the testing:

Name: _____

Title(s): _____

Signature: _____

Date: _____