INTERNATIONAL RECOMMENDATION

OIML R 126-3

Edition 2021 (E)

Evidential breath analysers

Part 3: Test report format

Ethylomètres

Partie 3 : Format du rapport d'essais

OIML R 126-3 Edition 2021 (E)

ORGANISATION INTERNATIONALE DE MÉTROLOGIE LÉGALE

INTERNATIONAL ORGANIZATION OF LEGAL METROLOGY

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Foreword

The International Organisation of Legal Metrology (OIML) is a worldwide, intergovernmental organisation whose primary aim is to harmonise the regulations and metrological controls applied by the national metrological services, or related organisations, of its Member States.

The main categories of OIML publications are:

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- **International Basic Publications (OIML B)**, which define the operating rules of the various OIML structures and systems.

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Additionally, the OIML participates in Joint Committees with other Institutions for the development of **Vocabularies (OIML V)** and **Joint Guides (G)** and periodically commissions legal metrology experts to write **Expert Reports (OIML E)**. Expert Reports are intended to provide information and advice, and are written solely from the viewpoint of their author, without the involvement of a Technical Committee or Subcommittee, nor that of the CIML. Thus, they do not necessarily represent the views of the OIML.

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Part 3 - Test report format

Introduction

This report format applies for any kind of evidential breath analysers (EBAs), independent of their technology. It presents a standardised format for recording the results of the various tests and examinations, described in this Recommendation, to which a type of EBA for alcohol detection shall be submitted with a view to its approval based on this OIML Recommendation.

The use of this report format as it is, or translated into a different language, is recommended to all metrology services or laboratories evaluating and/or testing types of EBAs for measuring breath alcohol according to OIML R 126, or according to national or regional regulations based on this Recommendation. If a translation is used, it is highly recommended to leave the structure and the clause numbers unchanged, in order to facilitate the interpretation of the contents by those readers who are not familiar with this other language.

The size of the fields should be adjusted as required to accommodate each specific record.

The report format, in its practical application, shall as a minimum contain clauses A–F (where applicable) in addition to a cover page issued by the Issuing Authority.

Applicability of this report format

In the framework of the *OIML Certification System* (*OIML–CS)* applicable to EBAs in conformity with this Recommendation, the use of this report format is mandatory. It shall be made available in English and/or in French and include copies translated into the national languages of the countries issuing such certificates, when appropriate.

Guidance for the application of this report format

Key to the symbols and expressions used on the following pages:

The "summary of the results" and the "results of the tests" shall be completed according to the following example:

Clause	Requirement or test	Passed	Failed	N/A*
#	<name>	X		
#	<name>		X	
#	<name>			X

* N/A: Requirement or test is not applicable to this instrument

Notes:

(1) Unless prescribed otherwise, "Date" in the report refers to the date of testing.

(2) The name(s) or symbol(s) of the unit(s) used to express the test results shall be specified in each form.

(3) Where in a table one or several choices can be made, checkboxes are applied.
In such a case, some or all of the columns Passed, Failed, N/A are not applicable and are thus presented greyed out or crosshatched (see the example below).

Clause	Description		Passed	Failed	N/A	Observations
		☐				
		☐				

If a prescribed test is not relevant for the type of instrument to be tested, the reason why the test is omitted shall be clearly stated in the field "Observations" (for instance surge tests on signal lines shorter than 30 m, tests related to AC mains supply in the case of an instrument only powered by DC mains supply, or partial testing after modification of a previously tested type).

The number of the report and the page numbers shall be completed in the heading.

The test report

The format for the report is presented on the following pages, starting with space for the cover page.

Cover page

by the

Issuing Authority

in accordance with national custom or legislation

Test report contents

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A References of the authority responsible for this report

Name	
Address	
Report number	
Application number	
Period of execution of the tests	
Date of issuing this report	
Name and signature of the person responsible for the report and stamp(s) (if applicable)	

B Synopsis of the results of the evaluation

(To be completed by the OIML Issuing Authority)

The evaluated EUT fulfils all the applicable and required criteria stated in OIML R 126-1:2021 and R 126-2:2021 ☐ Yes ☐ No
Observations:

C Summary of the results of the evaluation (examination and tests)

(To be completed by the OIML Issuing Authority)

C.1 Examinations

For details of the evaluation results, refer to the corresponding records in clause E of this report.

R 126-1 clause	Examinations	EUT(s) comply with referred clause			Details in
		Yes	No	N/A	
5	Units of measurement and decimal sign				E.1
6.1	Measuring range				E.2
6.2	Masking of low results (optional)				E.3
6.3	Scale interval				E.4
6.4	Multiple indicating devices				E.5
7.1.1.1	Indicating device				E.6
7.1.1.2	Availability of measurement results				E.7
7.1.1.3	Presentations when in metrological test mode				E.8
7.1.2	Protection against fraud				E.9
7.1.3	Checking operations				E.10
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8.1	Instruction manual				E.21
8.2	Additional instructions				E.22
9.1	Inscriptions				E.23
9.2	Sealing				E.24

R 126-2 clause	Examinations	EUT(s) comply with referred clause			Details in
		Yes	No	N/A	
2.2	Documentation				E.25
2.3.1	Visual examination				E.26

C.2 Performance tests

For details of the test results refer to the corresponding records in clause F of this report

Tests of R 126-2 clause	Performance tests	Corresponding requirements in R 126–1	EUT(s) comply with referred clause			Details in
			Yes	No	N/A	
2.5.5.1	Maximum permissible errors and repeatability	6.6, 6.7				F.1
2.5.5.2	Drift	6.8				F.2
2.5.5.3	Memory effects	6.9				F.3
2.5.5.4	Effect of water vapour (condensation)					F.4
2.5.6.1	Variations of the test gas parameters	6.10.2, 7.1.7				F.5
2.5.6.2	Alcohol in the upper respiratory tract	7.1.8				F.6
2.5.7.1	Temperatures test - Dry heat	6.10.1 Table 2				F.7a
2.5.7.1	Temperatures test - Cold					F.7b
2.5.7.2	Damp heat, steady state (non-condensing)					F.8
2.5.7.3	Static atmospheric pressure					F.9
2.5.7.4	Random vibration					F.10
2.5.7.5	DC mains voltage variations					F.11a
2.5.7.6	AC mains voltage variations					F.11b
2.5.7.7	AC mains frequency variations					F.12
2.5.7.8	Low voltage of internal battery					F.13
2.5.7.9	Power supply duration test (internal battery)					F.14
2.5.7.10	Voltage variations of road vehicle battery					F.15
2.5.7.11	Hydrocarbons in the environment					F.16
2.5.7.12	Raised fraction of CO_2 in the test gas					F.17
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2.5.8.2	Radiated RF electromagnetic fields					F.19
2.5.8.3	Electrostatic discharges					F.20
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2.5.8.7	Ripple on DC mains power					F.24
2.5.8.8	DC mains voltage dips, short interruptions and short-term variations					F.25
2.5.8.9	AC mains voltage dips, short interruptions and voltage variations					F.26
2.5.8.10	Surges on signal, data and control lines					F.27
2.5.8.11	Electrical transient conduction along supply lines					F.28
2.5.8.12	Electrical transient conduction via lines other than supply lines					F.29

Tests of R 126-2 clause	Performance tests	Corresponding requirements in R 126–1	EUT(s) comply with referred clause			Details in
			Yes	No	N/A	
2.5.8.13	Mechanical shock	6.11.1 Table 4				F.30
2.5.8.14	Shakes					F.31
2.5.8.15	Damp heat, cyclic (condensing)					F.31
2.5.8.16	Storage test					F.33
2.5.8.17	Vibration (as disturbance)					F.34
2.5.8.18	Durability	6.5				F.35
2.5.9	Physiological influence substances	6.11.2				F.36
2.6.1	Sand and dust (optional)	6.11.3				F.37
2.6.2	Salt mist (optional)					F.38
2.6.3	Water (optional)					F.39

D General information

D.1 Manufacturer

Company	
Address	

D.2 Applicant

Company	
Representative	
Address	
Reference	
Date of application	
Applicant is authorised by the manufacturer (documented)	☐ Yes ☐ No
It is verified that no application for OIML type evaluation for the same type has been made to any other OIML Issuing Authority (see OIML OIML-CS PD-05, 4.1.2)	☐ Yes ☐ No
Observations:	

D.3 Testing laboratories involved in the tests

(This table is to be completed for each testing laboratory)

Name		
Address		
Application number		
Tests by this laboratory		
Date/period of tests		
Name(s) of test engineer(s)		
Details of relevant peer assessment or assessment by other means where applicable	QA standard	
	Accreditation number:	Expires (date):
Entry area for detailed information if tests have not been performed on the premises of this laboratory but at a different location		
Name of the responsible person		
Date of signature		
Stamp (where applicable) and signature of the responsible person		
Observations:		

D.4 General information concerning the type and the EUT(s) supplied for the tests

Information, indicated on the instrument	
Manufacturer's trade mark	
Designation	
Serial number(s) of the EUT(s)	
Type	
Operating temperature range (*t* °C)	
Measuring range	
Printing device	
Storage temperature range (*t* °C)	
Identification of software	
Electrical power (voltage, frequency…)	
Power supply	

Relevant external/internal photographs taken during the examination and tests:

Remarks:

D.5 Accessories, supplied by the applicant (if applicable)

Operating instructions	
Battery	
Cables	
.....	
Examples are: Data printer (if applicable); ancillary devices, cabling and other accessories:	

D.6 Selection of EUTs tested

If the tests and examinations are valid for more versions, present full details of these versions, according to the listing of parameters and type designation in the way presented in D.4:
Justification of the selection of the EUTs:

The following EUTs have taken part in the examination:

EUT no.	Model	Serial no.
1		
2		
3		
4		
5		
…		

D.7 Adjustments, modifications and corrective action

D.7a Adjustments and modifications

Adjustments, modifications, and repairs made to the EUTs during the testing:

D.7b Correction and corrective action

Repairs, correction, analysis of the cause and corrective action made to the EUTs when they failed in a test. Impact analysis on results of previous tests.

D.8 Additional information concerning the type

Additional observations and/or information (connection equipment, interfaces, etc.):

D.9 Documentation supplied by the applicant

Observations:

NB: this documentation should contain all the documentation mentioned in R 126-2, 2.2

D.10 Results of previous tests that were taken into account

Details:

D.11 Information concerning the test equipment used for the type evaluation

(including details of simulations)

- Description of the test gas generator
- Characteristic reference values of the test gas
- If simplified means, description of the simplified means
- If a simplified means is used, the correction based on the error in the reference conditions must be given

E Examinations

To be completed by the evaluating authority
For each item of chapter E, the minimum mandatory information is:

- Date of the examination:
- Name of the technician:
- Serial number:
- Description of the test performed and result:
- Passed ☐ Failed ☐ Not applicable ☐

The results may be presented in a list of items or in a table such as the following table:

	Date of examination	**Name of technician**	**Serial numbers**	**Description of the test performed and result**	Results		
					Passed	Failed	N/A
E.1 Unit of measurement and decimal sign							
E.2 Measuring range							
E.3 Masking of low results (optional)							
E.4 Scale interval							
E.5 Multiple indicating devices							
E.6 Indicating device							
E.7 Availability of measurement results							

	Date of examination	**Name of technician**	**Serial numbers**	**Description of the test performed and result**	Results		
					Passed	Failed	N/A
E.8 Presentations when in metrological test mode							
E.9 Protection against fraud							
E.10 Checking operations							
E.11 Warm-up time							
E.12 Availability for measurement							
E.13 Power supply duration of internal batteries							
E.14 Continuity of exhalation							
E.15 Alcohol in the upper respiratory tract							
E.16 Mouthpieces							
E.17a Software identification							
E.17b Correctness of algorithms and functions							
E.17c Protection of software against fraud							
E.17d Detection of significant defects							

	Date of examination	**Name of technician**	**Serial numbers**	**Description of the test performed and result**	Results		
					Passed	Failed	N/A
E.17e Interfaces							
E.17f Maintenance and verification of EBA software							
E.17g Software documentation							
E.18 Printing device							
E.19 Storage and transmission of data							
E.20 Redundancy (optional)							
E.21 Instruction manual							
E.22 Additional instructions							
E.23 Inscriptions							
E.24 Sealing							
E.25 Documentation							
E.26 Visual examination							

F Performance tests

Notes on the use of the following tables:

"Reference concentration":	Actual concentration of the test gas used for the respective test
"Min" and "Max" (of reference concentration):	Within the repeated measurement of a test row, the test gas concentration might vary due to e.g. slight temperature and/ or pressure changes. This shall be taken into account and the Min- and Max-concentration for a test row shall be completed in the table.

F.1 Maximum permissible errors and repeatability (R 126-2 – 2.5.5.1)

Date of the examination						
Name of the technician						
Serial number						
Test apparatus used for the test						
Type of gas used for the test						
Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test gas no.	Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)	Experimental standard deviation (mg/L)	Maximum permissible standard deviation (mg/l)
	Min	Max							

F.2 Drift (R 126-2 – 2.5.5.2)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test 1				**Test 2**					
Reference concentration (mg/L)		Number of tests	Average error (mg/L)	Reference concentration (mg/L)		Number of tests	Average error (mg/L)	Difference between the mean values (mg/L)	Maximum permissible deviation (mg/L)
Min	Max			Min	Max				

F.3 Memory effects (R 126-2 – 2.5.5.3)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test 1							**Test 2**								
Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Maximum permissible error (mg/L)	Average error (mg/L)	Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Maximum permissible error (mg/L)	Average error (mg/L)	Difference between the mean values (mg/L)	Maximum permissible deviation (mg/L)
Min	Max						Min	Max							

F.4 Effect of water vapour (condensation) (R 126-2 – 2.5.5.4)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Reference concentration (mg/L)		Number of tests	Characteristic of the tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
Min	Max						

F.5 Variations of the test gas parameters (R 126-2 – 2.5.6.1)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Influence (a to f)	Reference concentration (mg/L)		Number of tests	Characteristic of the tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)	EUT response/error messages
	Min	Max							

F.6 Alcohol in the upper respiratory tract (R 126-2 – 2.5.6.2)

Date of the examination						
Name of the technician						
Serial number						
Test apparatus used for the test						
Type of gas used for the test						
Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)
Description of the detection method of the EUT and the appropriate test method						

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Reference concentration (mg/L)		Number of tests	Characteristic of the tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Displayed error message	Maximum permissible error (mg/L)
Min	Max						

Note: The table may be adapted to suit the method used.

F.7 (a and b) Temperature test (dry heat and cold) (R 126-2 – 2.5.7.1)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
		Min	Max					
Dry heat and cold	Special condition value of the test (Low temperature)							
	Special condition value of the test (High temperature)							

F.8 Damp heat, steady state (non-condensing) (R 126-2 – 2.5.7.2)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
		Min	Max					
Damp heat, steady state	Special condition value of the test							

F.9 Static atmospheric pressure (R 126-2 – 2.5.7.3)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
		Min	Max					
Atmospheric pressure	Special condition value of the test							

F.10 Random vibration (R 126-2 – 2.5.7.4)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
		Min	Max					
Random vibration	Special condition value of the test							

F.11 (a and b) Mains voltage variations (DC and AC) (R 126-2 – 2.5.7.5, 2.5.7.6)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
		Min	Max					
Mains voltage variations	Special condition value of the test (DC)							
	Special condition value of the test (AC)							

F.12 Mains frequency variations (AC) (R 126-2 – 2.5.7.7)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
		Min	Max					
Main frequency variation (AC)	Special condition value of the test							

F.13 Low voltage of internal battery (R 126-2 – 2.5.7.8)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
		Min	Max					
Low voltage of internal battery	Special condition value of the test							

F.14 Power supply duration test (internal battery) (R 126-2 – 2.5.7.9)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
		Min	Max					
Low voltage of internal battery	Special condition value of the test							

F.15 Voltage variations of a road vehicle battery (R 126-2 – 2.5.7.10)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
		Min	Max					
Voltage variations of road vehicle battery	Special condition value of the test							

F.16 Hydrocarbons in the environment (R 126-2 – 2.5.7.11)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
		Min	Max					
Total fraction by volume of hydrocarbons in the environment	Special condition value of the test							

F.17 Raised fraction of CO_2 in the test gas (R 126-2 – 2.5.7.12)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Minimum error value (mg/L)	Maximum error value (mg/L)	Average error (± mg/L)	Maximum permissible error (mg/L)
		Min	Max					
Influence of the volume fraction of CO_2	Special condition value of the test							

F.18 Conducted currents generated by RF EM fields (R 126-2 – 2.5.8.1)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Error of indication (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Conducted currents generated by RF EM fields	Special condition value of the test								

Note: The table may be adapted to suit the test scheme used (either A or B)

F.19 Radiated RF electromagnetic fields (R 126-2 – 2.5.8.2)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Error of indication (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Radiated, radio frequency, EM fields	Special condition value of the test								

Note: The table may be adapted to suit the test scheme used (either A or B)

F.20 Electrostatic discharges (R 126-2 – 2.5.8.3)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Electrostatic discharges	Special condition value of the test								

F.21 Bursts (transients) on AC and DC mains (R 126-2 – 2.5.8.4)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Bursts on AC and DC mains	Special condition value of the test								

F.22 Surges on AC and DC mains power lines (R 126-2 – 2.5.8.5)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	RH %	p (hPa)	T (°C)	RH %	p (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Surges on AC and DC mains power lines	Special condition value of the test								

F.23 Bursts on signal, data and control lines (R 126-2 – 2.5.8.6)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Bursts on signal, data and control lines	Special condition value of the test								

F.24 Ripple on DC mains power (R 126-2 – 2.5.8.7)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Ripple on DC main power	Special condition value of the test								

F.25 DC mains voltage dips, short interruptions and short-term variations (R 126-2 – 2.5.8.8)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
DC mains voltage dips, short interruptions and voltage variations	Special condition value of the test								

F.26 AC mains voltage dips, short interruptions and voltage variations (R 126-2 – 2.5.8.9)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
AC mains voltage dips, short interruptions and voltage variations	Special condition value of the test								

F.27 Surges on signal, data and control lines (R 126-2 – 2.5.8.10)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Electronical transient conduction along supply lines	Special condition value of the test								

F.28 Electrical transient conduction along supply lines (R 126-2 – 2.5.8.11)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Electronical transient conduction along supply lines	Special condition value of the test								

F.29 Electrical transient conduction via lines other than supply lines (R 126-2 – 2.5.8.12)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Electrical transient conduction via lines other than supply lines	Special condition value of the test								

F.30 Mechanical shock (R 126-2 – 2.5.8.13)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors after the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Mechanical shock	Special condition value of the test								

F.31 Shakes (R 126-2 – 2.5.8.14)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors after the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Shakes	Special condition value of the test								

F.32 Damp heat, cyclic (condensing) (R 126-2 – 2.5.8.15)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors after the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Damp heat, cyclic (condensing)	Special condition value of the test								

F.33 Storage test (R 126-2 – 2.5.8.16)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors after the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Storage test	Special condition value of the test								

F.34 Vibration (as disturbance) (R 126-2 – 2.5.8.17)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH* %	*p* (hPa)	*T* (°C)	*RH* %	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors after the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Vibration	Special condition value of the test								

F.35 Durability (R 126-2 – 2.5.8.18)

Description of the test performed and result.

The requirement is met if the EUT(s) submitted to the accuracy tests and disturbance test passes each single test:

Passed ☐ Failed ☐ Not applicable ☐

F.36 Physiological influence substances (R 126-2 – 2.5.9)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH%*	*p* (hPa)	*T* (°C)	*RH%*	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Concentration of ethanol in the reference gas (mg/L ± 5 %)	Tested substance	Nominal value for interferent vapour mass concentration (mg/L ± 5 %)	Number of tests	Results of the EBA without the interfering substances (mg/L)	Results of the EBA with the interfering substances (mg/L)	Sensitivity (mg/L)	Maximum sensitivity (mg/L)

F.37 Sand and dust conditions (optional) (R 126-2 – 2.6.1)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH%*	*p* (hPa)	*T* (°C)	*RH%*	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during or after the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Disturbances expected in specific environmental conditions	Special condition value of the test								

F.38 Salt mist (optional) (R 126-2 – 2.6.2)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH%*	*p* (hPa)	*T* (°C)	*RH%*	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during or after the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Disturbances expected in specific environmental conditions	Special condition value of the test								

F.39 Water (optional) (R 126-2 – 2.6.3)

Date of the examination	
Name of the technician	
Serial number	
Test apparatus used for the test	
Type of gas used for the test	

Test conditions	Before the tests			After the tests		
	T (°C)	*RH%*	*p* (hPa)	*T* (°C)	*RH%*	*p* (hPa)

Description of the test performed and result

Passed ☐ Failed ☐ Not applicable ☐

Test		Reference concentration (mg/L)		Number of tests	Intrinsic error (average of the errors under reference conditions) ($\bar{E}_{ref}$) (mg/L)	Measurement error (average of the errors during or after the disturbance) ($\bar{E}_i$) (mg/L)	Fault $\bar{E}_i - \bar{E}_{ref}$ (mg/L)	Fault limit (mg/L)	Observations
		Min	Max						
Disturbances expected in specific environmental conditions	Special condition value of the test								