# International Recommendation

## **OIML R 129-3**

Edition 2020 (E)

### Multi-dimensional measuring instruments

Part 3: Test report format

Instruments de mesure multidimensionnels

Partie 3: Format du rapport d'essais



Organisation Internationale de Métrologie Légale

International Organization of Legal Metrology

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#### **Foreword**

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

The main categories of OIML publications are:

- International Recommendations (OIML R), which are model regulations that establish the metrological characteristics required of certain measuring instruments and which specify methods and equipment for checking their conformity. OIML Member States shall implement these Recommendations to the greatest possible extent;
- International Documents (OIML D), which are informative in nature and which are intended to harmonize and improve work in the field of legal metrology;
- International Guides (OIML G), which are also informative in nature and which are intended to give guidelines for the application of certain requirements to legal metrology; and
- International Basic Publications (OIML B), which define the operating rules of the various OIML structures and systems.

OIML Draft Recommendations, Documents and Guides are developed by Project Groups linked to Technical Committees or Subcommittees which comprise representatives from the Member States. Certain international and regional institutions also participate on a consultation basis. Cooperative agreements have been established between the OIML and certain institutions, such as ISO and the IEC, with the objective of avoiding contradictory requirements. Consequently, manufacturers and users of measuring instruments, test laboratories, etc. may simultaneously apply OIML publications and those of other institutions.

International Recommendations, Documents, Guides and Basic Publications are published in English (E) and translated into French (F) and are subject to periodic revision.

Additionally, the OIML publishes or participates in the publication of **Vocabularies (OIML V)** 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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#### 1 Introduction

The "Test report format", the subject of OIML R 129-3, aims at presenting, in a standardised format, the results of the various tests and examinations to which a type of a multi-dimensional measuring instrument (MDMI) shall be submitted with a view to its approval.

The "Test report format" is a record of the results of the tests carried out on the instrument. The forms have been produced based on the tests detailed in the performance test procedures (OIML R 129-2).

The "Information concerning the test equipment used for type evaluation" shall cover all test equipment which has been used in determining the test results given in a report. The information may be a short list containing essential data (name, type, reference number for purpose of traceability). For example:

- Verification standards (accuracy or accuracy class, and no.);
- Simulator for testing of modules (name, type, traceability and no.);
- Climatic test and static temperature chamber (name, type and no.);
- Electrical tests, bursts (name of the instrument, type and no.);
- Description of the procedure of field calibration for the electromagnetic susceptibility test.

All metrology services or laboratories evaluating types of multi-dimensional measuring instrument according to OIML R 129-1 and -2, or to national or regional regulations based on OIML R 129-1 and -2, are strongly advised to use this "Test report format", directly or after translation into a language other than English or French. Its direct use in English or in French, or in both languages, is even more strongly recommended whenever test results may be transmitted by the country performing these tests to the approving authorities of another country, under bi- or multi-lateral cooperation agreements. In the framework of the OIML Certification System (OIML-CS), use of the "Test report format" is mandatory.

#### 1.1 Explanatory notes to the test report

Meaning of symbols used in this report

L = Indicated length

W = Indicated width

H = Indicated height

 $L_{\rm T}$  = Length of the test object

 $DL = Error, L - L_T$ 

 $W_{\rm T}$  = Width of the test object

 $DW = \text{Error}, W - W_T$ 

 $H_{\rm T}$  = Height of the test object

 $DH = Error, H - H_T$ 

mpe = Maximum permissible error

V =Volume indicated on the instrument

 $V \operatorname{calc} = L \times W \times H$ 

F =Conversion factor

DW = Dimensional weight indicated on the instrument

 $\mathbf{DWcalc} = V \times F$ 

SF = Significant fault

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

The boxes under the headings of the report should always be filled in according to the following example:

-	At start	At end	_
Temp.:	20.5	21.1	°C
Rel. h.:			%
Date:	15/10/2014	15/10/2014	yyyy-mm-dd
Time:	16:00:05	16:30:05	hh:mm:ss

where Temp. = temperature

Rel. h. = relative humidity

"ID" refers to the identity of the test object used (e.g. unique identifying number) and is entered in the appropriate columns as required.

<sup>&</sup>quot;Date" in the test report refers to the date on which the test was performed.

#### 1.2 Identification of the instrument

Application no.:		Type designation:	
Identification no.:		Manufacturer:	
Software version:			
Report date:			
Documentation from the ma	anufacturer		
(Record as necessary to ide	ntify the equipment under test)		
System or module name	Drawing number or software reference	Issue level	Serial no.
***************************************			
		118811888118881188811888118881188811888118881	
***************************************			***************************************
			***************************************
Simulator documentation (i	f applicable)		
System or module name	Drawing number or software reference	Issue level	Serial no.
		118881188811888118881188811888118881188811888	***************************************
		118881188881188811888118881188811888118881	
			***************************************
***************************************			***************************************

#### 1.2 Identification of the instrument (cont'd)

Application no.:	Type designation:
Identification no.:	Manufacturer:
Software version:	
Report date:	
Simulator function (sur	nmary) (if applicable)
(Simulator description	and drawings, block diagram, etc. should be attached to the report if available)

1.2 Identification of the instrument (cont'd)					
Application no.:	Type designation:				
Identification no.:	Manufacturer:				
Software version:					
Report date:					
Physical description of the ins	strument				
	cal construction of the MDMI (materials, configuration and location of components, Attach photographs, diagrams or drawings if available:				
Describe, using point form, the measu class, power and wavelength; ultrason	rement technology used (include details such as physical contact method; laser iic frequency; or camera spectrum):				

#### 1.3 General information concerning the type

Application no.:		Manufacturer:	
Type designation:		Applicant:	
Instrument category:			
	Parameter limits		1
	Minimum	Maximum	
Temperature limits (°C)			
Speed limitations (m/s)			
Voltage (V)			
Minimum spacing		/	
Limitation		Check if applicable	
	Object	опости прричине	
Cuboidal			
Irregular			
Singulated			
Non-singulated, non-touching	g		
Touching	_		
	Measurement dynamics		
Static measurement only			
Fixed speed			
Variable speed			
Unidirectional			
Bidirectional			
	Installation		
Permanent			
Mobile			
	Power supply		
AC			
AC-DC converter			
Battery			
DC			İ
Evaluation period:			
Date of report:			
Observer:			

1.3 General information concerning the typ	oe (cont'd)					
Application no.:		Manufacturer				
Type designation:		Applicant				
Instrument category:				-		
Scale interval and limits of indication						
Axis	Unit of measurement	Scale interval (d)	Minimum dimension	Maximum dimension		
X						
Y						
Z						
Describe, using point form, each axis and its relation to the physical object being measured and/or the MDMI itself:  Use this space to describe, using point form, any other use or installation limitations not detailed in the above on the previous page (such as special applications other than postage, freight or storage; restrictions on object material, texture, reflectivity or colour; object positioning):						
Use this space to indicate additional remarks and/or inf disturbances, etc.	Formation: connecting equipme	ent, interfaces, choice of the r	nanufacturer regarding pro	tection against		

1.3 General information concerning the type (cont'	1.3	General	information	concerning the	tvpe	(cont'd	)
--	-----	---------	-------------	----------------	------	---------	---

Application no.:	Manufacturer:	
Type designation:	Applicant:	
Instrument category:		

#### **Indications and controls**

Describe, using point form, all indications and controls of the instrument (such as wired or wireless communication with instrument, zero method, ready indication, computed quantities, error codes). Describe each measurement (L, W, and H) and its relation to the physical object being measured and/or the MDMI itself:

#### **Sealing**

Describe, using point form, the physical and electronic seals (e.g. audit trails) used to protect the metrological characteristics of the instrument, and how to access them. Also describe any remote access abilities available and how this is sealed:

#### **Software**

Describe, using point form, the means used to protect legally relevant software in the instrument and indicate the version of the software present at the time of testing and how to verify this version number:

#### 1.4 Information concerning the test equipment used for testing

Application no.:	Type designation:		
Report date:		Manufacturer:	
•			

List all test equipment used in this report (including descriptions of the equipment used for testing)

Equipment name	Manufacturer	Type no.	Serial no.	Used for (test references)

#### 1.5 Configuration for test

Application no.:	Type designation:		
Report date:	Manufacturer:		
Use this space for additional information and/or simulator.	relating to equipment configuration, interfac	ees, data rates, EMC protection o	ptions, etc., for the instrument
Calibration principle			
Calibration number	GT1	GT2	etc.*
Version number:			
Displayed name:			
Date submitted:			
Regression information			
Approx number of data points:			
Data sources, date range			
Reference method(s):			
Other validation result (e.g. SD, SEP)			
Default slope (if applicable):			
Default bias (if applicable):			
Other characteristic:			
*Copy table into additional pages if more	e than two calibrations are submitted for exam	mination	
Comments:			

1.6 Adjustments or modifications									
Application no.:	Type design	ation:							
		***************************************							
Report date:	Manufac	turer:							
1	180188108811881188118811881188118811881	***************************************							
-	additional information relating to the identification e to the sample or samples during the evaluation.	of any authorised and agreed upon adjustments or							

#### 2 Type evaluation tests

#### 2.1 Summary of type evaluation

Report no.:	
Application no.:	
Manufacturer:	
Make and model:	

Section	Test	Report page	Pass	Fail	Remarks
2.2	Instrument warm-up time (A.1.1)				
2.3	Repeatability (A.1.2)				
2.4	Static temperatures (A.2.1)				
2.4.1	Initial reference temperature = °C				
2.4.2	High temperature = °C				
2.4.2	Low temperature = °C				
2.4.3	End reference temperature = °C				
2.5	Damp heat			<del></del>	
2.5.1	Steady state (non-condensing) (A.2.2)				
2.5.1.1	Initial reference temperature and 50 % relative humidity				
2.5.1.2	High temperature and 85 % relative humidity				
2.5.1.3	End reference temperature and 50 % relative humidity				
2.5.2	Cyclic (condensing) (A.3.6)				
2.5.2.1	DH cyclic				
2.6	AC mains voltage variation (A.2.3)	l			
2.6.1	Nominal voltage				
2.6.2	Nominal voltage + 10 %				
2.6.3	Nominal voltage – 15 %				
2.7	Low voltage of internal battery (A.2.4)	<u> </u>			
2.7.1	Nominal voltage				
2.7.2	Low voltage				
2.7,3	90 % of Minimum voltage				
	AC mains voltage dips, short interruptions and reductions				
2.8	(A.3.1)				
2.9	Electrical bursts test (A.3.2)	<u> </u>			
2.9.1	Power supply lines				
2.9.2	Input/output control circuits and communication lines				
2.10	Electrostatic discharge (A.3.3)	l			
2.10.1	Direct application				
2.10.2	Indirect application				
2.11	Electrical surges (A.3.4)				
2.11.1	Surges on AC mains power lines (A.3.4.1)				
2.11.1.1	AC surge voltage at 0°				
2.11.1.2	AC surge voltage at 90°				
2.11.1.3	AC surge voltage at 180°				
2.11.1.4	AC surge voltage at 270°				
2.11.2	Surges on signal, data and control lines (A.3.4.2)				
2.12	Immunity to RF electromagnetic fields (A.3.5)				
2.12.1	Radiated RF electromagnetic fields (A.3.5.1)				
2.12.1	Conducted RF electromagnetic fields (A.3.5.2)				
۷.12.2	Conducted XI electromagnetic fields (A.3.3.2)	]			

#### 2.1 Summary of type evaluation (cont'd)

Section	Test	Report Page	Pass	Fail	Remarks
2.13	Ambient light (A.4.1)	ı uge		l l	
2.13.1	200 lx to 500 lx (reference)				
2.13.2	100 lx				
2.13.3	1000 lx to 1500 lx				
2.13.4	Other intensity lx				
2.14	Acoustics (A.4.2)				
2.14.1	Reference sound level ( dB)				
2.14.2	Sound level 100 dB				
2.15	Shape of the object (A.1.6)				
2.16	Uniform surface colour test (A.1.6)				
2.17	Non uniform surface colour test (A.1.6)				
2.18	Contrast of colour with background colour test (A.1.6)				
2.19	Surface reflectivity and absorption of sound test (A.1.6)				
2.20	Surface reflectivity and absorption of colour test (A.1.6)				
2.21	Uniformity of density test (A.1.6)				
2.22	Transparency test (A.1.6)				
2.23	Surface roughness test (A.1.6)				
2.24	Protrusions on the surface test (A.1.6)				
2.25	Orientation and position test (A.1.6)				
2.26	Speed of relative movement test (A.1.6)				
2.26.1	Minimum speed				
2.26.2	Maximum speed				
2.27	Examination of the construction of the instrument (R 129-1, 5.1.2)		_		

2.2 Instrument warn	n-up time (A.1	.1)							
Observer: Type/application no.:				ı	Т	Cemp (°C)		At end	]
Instrument ID:				ı		RH (%)			]
Scale interval (d):				ı		Time			
Conversion factor (F)	, , , , , , , , , , , , , , , , , , , ,			ı		Date			
Test abject along to m	-ininayan diman				Tost obio	at ID		1	]
Test object, close to n	nınımum dimer	isions			Test object	ct ID		J	
Length =			Width =		]	Height =			
unit =			unit =			unit =			
									]
Test object, close to n	naximum dime	nsions			Test object	ct ID			
Length =		]	Width =		7	Height =		]	
unit =			unit =			unit =			
Test object, close to n	ninimum dimer	nsions			Test object	ct ID			
	Initial								
Time	zeroing/ready	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail
Time	condition		$\Box L$	"	<i>Δ γ γ</i>	11		mpe	1 488/1 411
	(yes/no)								
0 minutes									
5 minutes									
15 minutes									
30 minutes									
Test object, close to n	naximum dime	nsions			Test object	ct ID			
	Initial								
Time	zeroing/ready	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail
Time	condition	L	ZL.	,,	4"	11	211	mpc	1 455/1 411
	(yes/no)								
0 minutes									
5 minutes									
15 minutes									
30 minutes									
Remarks									
RESULT:		PASS		ì	FAIL		1		

### 2.3 Repeatability (A.1.2)

Observer: Type/application Instrument ID: Scale interval ( Conversion fac	d):							Temp (°C) RH (%) Time Date		At end			
Ancillary device	e:	Connected		]	Not connected but connected				Not connected				
Correct indicate	ion of ancilla	ry device		(yes/no)	out connectat	ne							
Conveyor speed	d (m/min):	Minimum		]	Maximum			Other					
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing dy condition)		yes no		
Run (units)	L	ΔL	W	$\Delta W$	Н	$\Delta H$	mpe	V	Vcalc	DW	DWcalc	Pass/Fail	
1 2													
3													
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing dy condition)		yes no		
Run (units)	L	ΔL	W	$\Delta W$	Н	$\Delta H$	mpe	V	V calc	DW	DWcalc	Pass/Fail	
1							_			_			
3													
J	I	1		I	I	1		1	I		I		

#### 2.3 Repeatability (A.1.2) (cont'd)

Test object ID		Length =		Width =		Height =		]	Initial zeroing		yes	
		unit =		unit =		unit =		(Rea	ndy condition)		no	
							1					
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	V	Veale	DW	DWcalc	Pass/Fail
(units)				1		ļ						
1												
3		-										
3						1						
Test object ID		Length =		Width =		Height =			Initial zeroing		yes	
, L		unit =		unit =		unit =			ndy condition)		no	
		•						`	, , <u>, , , , , , , , , , , , , , , , , </u>			
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	V	Veale	DW	DWcalc	Pass/Fail
(units)												
1												
2												
3												
Test object ID		T41		Width =		II-:-1-4 —			Initial zeroing			
Test object ID		Length = unit =		unit =		Height = unit =			ndy condition)		yes no	
				ullit –		ullit –		(ICC	idy condition)			
		unit –										
Run	L		W	1W	Н	ЛΗ	mpe	V	Veale	DW	DWcalc	Pass/Fail
Run (units)	L	ΔL	W	$\Delta W$	Н	ΔН	mpe	V	V calc	DW	DWcalc	Pass/Fail
Run (units)	L		W	$\Delta W$	Н	ΔН	mpe	V	Vcalc	DW	DWcalc	Pass/Fail
(units)	L		W	$\Delta W$	Н	ΔН	mpe	V	V calc	DW	DWcalc	Pass/Fail
(units)	L		W	ΔW	Н	ΔH	mpe	V	Veale	DW	DWcalc	Pass/Fail
(units) 1 2 3	L		W	$\Delta W$	Н	ΔН	mpe	V	Veale	DW	DWcalc	Pass/Fail
(units) 1 2 3	L		W	$\Delta W$	Н	ΔH	mpe	V	Veale	DW	DWcalc	Pass/Fail
(units) 1 2 3	L		W	ΔW	Н	ΔΗ	mpe	V	Veale	DW	DWcalc	Pass/Fail
(units) 1 2 3	L		W	ΔW	Н	ΔH	mpe	V	Veale	DW	DWcalc	Pass/Fail
(units) 1 2	L		W	ΔW	Н	ΔΗ	mpe	V	Veale	DW	DWcalc	Pass/Fail
(units) 1 2 3	L		W	ΔW	Н	ΔΗ	mpe	V	Veale	DW	DWcalc	Pass/Fail
(units)  1 2 3  Remarks	L RESULT:		W	PASS	Н	ΔH		FAIL	Veale	DW	DWcalc	Pass/Fail

2.4 Static tem 2.4.1 Initial ref			)										
Observer: Type/application Instrument ID: Scale interval (d Conversion factor	):							Temp (°C) RH (%) Time Date		At end			
Ancillary device	<b>:</b> :	Connected		]	Not connect				Not connec	ted		]	
Correct indication	on of ancillary	device		(yes/no)	but connect	able							
Conveyor speed	(m/min):	Minimum		]	Maximum		]	Other		]			
Test object ID  1 2 3 4 5	Length (units)	Width (units)	Height (units)										
	Initial zeroing	,	47	<u> </u>	AW		411	Τ	17	17. 1	DW	DW 1	D /F 1
Test object ID	(yes/no)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	V	Veale	DW	DWcalc	Pass/Fail
2				1			1						
3							1						
4													
5													
Remarks													
	RESULT:			PASS				FAIL		]			

#### 2.4 Static temperatures (A.2.1)

#### 2.4.2 High and low temperatures (A.2.1)

Observer: Type/application no Instrument ID: Scale interval (d): Conversion factor (I					 			Temp (°C) RH (%) Time Date		At end			
Ancillary device:		Connected			Not connec			]	Not connec	ted		l	
Correct indication o	f ancillary de	vice		(yes/no)	but connect	able							
Conveyor speed (m/	min):	Minimum			Maximum			Other					
Test object ID	Length (units)	Width (units)	Height (units)										
1													
2													
3													
4													
5													
				•								High ter	mperature
Test object ID	Initial zeroing (Yes/No)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	V	Veale	DW	DWcalc	Pass/Fail
1													
2													
3													
1													

#### 2.4.2 High and low temperatures (cont'd)

												Low temperature	
Test object ID	Initial zeroing (Yes/No)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	V	Veale	DW	DWcalc	Pass/Fail
1													
2													
3													
4													
5													

Remarks				
	RESULT:	PASS	FAIL	

#### 2.4 Static temperatures (A.2.1) 2.4.3 Reference temperature (A.2.1) Observer: At start At end Temp (°C) Type/application no.: RH (%) Instrument ID: Scale interval (d): Time Conversion factor (F): Date Not connected Ancillary device: Not connected Connected but connectable Correct indication of ancillary device (yes/no) Conveyor speed (m/min): Minimum Maximum Other Width Height Length Test object ID (units) (units) (units) 3 4

Test object ID	Initial zeroing (yes/no)	L	$\Delta L$	W	$\Delta W$	Н	ΔH	mpe	V	V calc	DW	DWcalc	Pass/Fail
1													
2													
3													
4													
5													

Remarks			
RESULT:	PASS	FAIL	

25	<b>Damp</b>	heat
∠.ა	Damp	meat

## 2.5.1 Steady state (non-condensing) (A.2.2) 2.5.1.1 Initial reference temperature and 50 % relative humidity

2.3.1.1 IIIIIIIII	cici ciice teili	perature and	30 /0 1 Clati	ve number								
Observer: Type/application Instrument ID: Scale interval (d Conversion fact	l):				 			Temp (°C) RH (%) Time Date		At end		
Ancillary device		Connected			Not connected but connected			]	Not connected	d		
Correct indication	on of ancillar	y device		(yes/no)								
Conveyor speed	(m/min):	Minimum			Maximum		]	Other				
Test object ID	Length (units)	Width (units)	Height (units)									
3				-								
4				4								
5				-								
		ı										
Test object ID	Initial zeroing (Yes/No)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	V	V calc	DW	DWcalc
1												
2												
3												
4												
5 Remarks		1					1					
	RESULT:			PASS		]		FAIL				

#### 2.5 Damp heat

#### 2.5.1 Steady state (non-condensing) (A.2.2)

#### 2.5.1.2 High temperature and 85 % relative humidity

Observer: Type/application Instrument ID: Scale interval (d Conversion fact	):							Temp (°C) RH (%) Time Date	;	At end		
Ancillary device	::	Connected		]	Not connect			]	Not connecte	d		
Correct indication	on of ancillar	y device		(yes/no)	but connects	able						
Conveyor speed	(m/min):	Minimum		]	Maximum		I	Other				
Test object ID  1 2 3 4 5	Length (units)	Width (units)	Height (units)									
3												
Test object ID	Initial zeroing (Yes/No)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	V	V calc	DW	DWcalc
1												
3				+								
4												
5												
Remarks												
	RESULT:			PASS		]		FAIL				

#### 2.5.1 Steady state (non-condensing) (A.2.2)

2.5.1.3 End ref	erence tempera	ture and 50 %	6 relative hu	midity									
Observer: Type/application Instrument ID: Scale interval (d Conversion fact	l):				  			Temp (°C' RH (%) Time Date		At end			
Ancillary device	<b>:</b> :	Connected		]	Not connec				Not connec	eted		]	
Correct indication	on of ancillary d	evice		(yes/no)	but connect	table							
Conveyor speed	(m/min):	Minimum		]	Maximum		]	Other		]			
Test object ID  1 2 3 4 5	Length (units)	Width (units)	Height (units)										
Test object ID	Initial zeroing (Yes/No)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	V	V calc	DW	DWcalc	Pass/Fail
1 2 3													
4 5													
Remarks	•	•	•		•	•	•	•	•		•		
	RESULT:			PASS		]		FAIL		]			

	2.5	<b>Damp</b>	heat
--	-----	-------------	------

## 2.5.2 Cyclic (condensing) (A.3.6)

eat cyclic								
n no.: ): or (F):						RH (%) Time		At en
:	Connected		]	Not connected		Not	connected	
on of ancillary de	evice		(yes/no)	but connectable				
(m/min):	Minimum		]	Maximum		]	Other	
Length (units)	Width (units)	Height (units)	]					
			]					
	T	T 11 .1		T	T	Ref temp (°C)		
_			7.7	SF*	SF*	Result	Comment	
(yes/no)	L	W	H	V/NI	V/NI	Dogg/Foil		
				I/IN	I/IN	Pass/raii		
	I							
	): or (F): : on of ancillary de (m/min):  Length (units)	cor (F):  Connected on of ancillary device (m/min):  Minimum  Length (units)  Units	cor (F):  Connected  on of ancillary device  (m/min):  Minimum  Length (units) (units) (units)  Initial zeroing  Indication	cor (F):  : Connected (yes/no)  (m/min): Minimum (units) (units)  Initial zeroing Indication	cor (F):  : Connected Not connected but connectable on of ancillary device (yes/no)  (m/min): Minimum Maximum  Length Width Height (units) (units)  (units) (units)  Initial zeroing Indication	): or (F):  : Connected	RH (%)   Time   Date	Temp (°C)

#### 2.5.2.1 Damp heat cyclic (A.2.2.2) (cont'd)

							Ref temp (°C)	
Test object ID	Initial zeroing (yes/no)		Indication		SF*	SF*	Result	Comment
Test object ID	(yes/no)	L	W	Н	SI	31	Result	Comment
1					Y/N	Y/N	Pass/Fail	
2								
3								
4								
5		·						·

1. SF* - significant fa	nult detected and acted upon	•		
Remarks				
RESULT:	PASS		FAIL	

#### 2.6 AC mains voltage variation (A.2.3) 2.6.1 Nominal voltage (A.2.3) At start Observer: At end Type/application no.: Temp (°C) Instrument ID: RH (%) Nominal voltage (V) Scale interval (d): Conversion factor (F): Time Date Ancillary device: Not connected Not connected Connected but connectable Correct indication of ancillary device (yes/no) Conveyor speed (m/min): Minimum Maximum Other Length Width Height Test object ID (units) (units) (units) 4 Initial Test object ID zeroing L $\Delta L$ WН $\Delta H$ VDW DWcalc Pass/Fail $\Delta W$ Vcalc mpe (Yes/No) 2 5 Remarks **RESULT: PASS FAIL**

#### 2.6 AC mains voltage variation (A.2.3) 2.6.2 Nominal voltage -15 % (A.2.3) Observer: At start At end Type/application no.: Temp (°C) Instrument ID: RH (%) Nominal voltage - 15% (V) Scale interval (d): Conversion factor (F): Time Date Ancillary device: Not connected Not connected Connected but connectable Correct indication of ancillary device (yes/no) Conveyor speed (m/min): Minimum Maximum Other Width Height Length Test object ID (units) (units) (units) 4 Initial Test object ID zeroing LWHVDW Pass/Fail $\Delta L$ $\Delta W$ $\Delta H$ Vcalc DWcalc mpe (Yes/No) 2 5 Remarks **RESULT: PASS FAIL**

#### 2.6 AC mains voltage variation (A.2.3) 2.6.3 Nominal voltage +10 % (A.2.3) At start Observer: At end Temp (°C) Type/application no.: Instrument ID: RH (%) Nominal voltage + 10% (V) Scale interval (d): Conversion factor (F): Time Date Ancillary device: Connected Not connected Not connected but connectable Correct indication of ancillary device (yes/no) Conveyor speed (m/min): Minimum Maximum Other Width Height Length Test object ID (units) (units) (units) 4 Initial Test object ID zeroing LW $\Delta W$ Н VDWDWcalc Pass/Fail $\Delta L$ $\Delta H$ Vcalc mpe (Yes/No) 2 3 4 5 Remarks RESULT: **PASS FAIL**

2.7 Low voltag 2.7.1 Nominal v			(A.2.4)										
Observer: Type/application Instrument ID: Scale interval (d) Conversion factor	  			Ma	rked nominal	Temp (°C) RH (%) voltage (V) Time Date	At start	At end					
Ancillary device	:	Connected		]	Not connec			]	Not connect	ted		]	
Correct indicatio	n of ancilla	ry device		(yes/no)	but connect	able							
Conveyor speed	(m/min):	Minimum		]	Maximum		]	Other					
Test object ID  1 2	Length (units)	Width (units)	Height (units)										
3				1									
4				1									
5				]									
Test object ID	Initial zeroing (Yes/No)	L	ΔL	W	$\Delta W$	Н	ΔН	mpe	V	V calc	DW	DWcalc	Pass/Fail
1													
2													
3					+								
5													
J				l	1	<u> </u>	<u> </u>	<u> </u>	<u> </u>				
Remarks													
	RESULT:			PASS		]		FAIL					

2.7 Low voltag 2.7.2 Low voltag		nal battery	(A.2.4)										
Observer: Type/application no.: Instrument ID: Scale interval (d): Conversion factor (F):					  				Low	Temp (°C) RH (%) voltage (V) Time Date		At end	
Ancillary device:		Connected			Not connected Not connected but connectable					ted			
Correct indicatio	on of ancillar	ry device		(yes/no)	but connect	able							
Conveyor speed	(m/min):	Minimum		]	Maximum			Other					
Test object ID	Length (units)	Width (units)	Height (units)										
3				-									
4				1									
5													
	Initial	1		1				Ī					
Test object ID	zeroing (Yes/No)	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	V	V calc	DW	DWcalc	Pass/Fail
1													
2													
3													
4													
5													
Remarks													
	RESULT:			PASS		]		FAIL					

2.7 Low voltag 2.7.3 90 % of mi			(A.2.4)										
Type/application no.: Instrument ID: Scale interval (d): Conversion factor (F):					 				Low	Temp (°C) RH (%) voltage (V) Time Date	At start	At end	
Ancillary device:		Connected				Not connected Not connected but connectable							
Correct indication	n of ancilla	ry device		(yes/no)									
Conveyor speed (	(m/min):	Minimum		]	Maximum		]	Other					
Test object ID  1 2	Length (units)	Width (units)	Height (units)										
3													
4				1									
5				J									
Test object ID	Initial zeroing (Yes/No)	L	ΔL	W	∆W	Н	ΔН	mpe	V	V calc	DW	DWcalc	Pass/Fail
1													
3													
4													
5			_						_	_			_
Remarks													
	RESULT:			PASS		]		FAIL					

#### 2.8 AC mains voltage dips, short interruptions and reductions (A.3.1)

Observer: Type/application no.: Instrument ID: Scale interval (d): Conversion factor (F):						Temp (°C)  RH (%)  Time  voltage (V)  Date	At start	At end
Ancillary device:	Connected		Not connected but connectable		Not connected		[	
Correct indication of ancillary	device	(yes/no)	but connectable					
Conveyor speed (m/min):	Minimum		Maximum		Other			
Test object ID	Length=	Width=		Height=	Ini	tial zeroing		yes
	unit=	unit=		unit=	(Ready	condition)		no
T								

#### Instrument

Reduction in amplitude to (as % marked nom voltage)	Duration* (in cycles)	Number of disturbances	Time between disturbances	Indication			SF*	SF*	Result	Comment
		≥ 10	≥ 10 s	L $W$ $H$		Н				
				Y/N	Y/N	Pass/Fail				
0	0	0	_							
0	0.5									
0	1									
40 10/12										
70	25/30									
80	250/300									
0	250/300									

## 2.8 AC mains voltage dips, short interruptions and reductions (A.3.1) (cont'd)

#### **Ancillary device**

Reduction in amplitude to (as % marked nom voltage)	Duration* (in cycles)	Number of disturbances	Time between disturbances	Indication		SF* SF*		Result	Comment	
		≥ 10	≥ 10 s	L	W	Н				
	units						Y/N	Y/N	Pass/Fail	
0	0	0	_							
0	0.5									
0	1									
40	10/12									
70	25/30									
80	250/300									
0	250/300									

Notes:	<ol> <li>SF* - significant fault detected and acte</li> </ol>	ed upon.					
	2. amplitude* - in case of a marked voltage	ge range, use the av	erage value as the m	arked nominal voltage.			
	3. duration* - values applicable for 50 Hz	z / 60 Hz respective	ly.				
Remarks							
	RESULT:	PASS			FAIL		

## 2.9 Electrical bursts (A.3.2)

### 2.9.1 Power supply lines (A.3.2)

Observer: Type/application no.: Instrument ID: Scale interval (d): Conversion factor (F)					  		Nomina	Temp (°C) RH (%) Time al voltage (V) Date		At end	
Ancillary device:		Connected		]	Not connected but connectable			Not con	nnected		
Correct indication of	ancillary devi	ice		(yes/no)	out connectaore						
Conveyor speed (m/m	nin):	Minimum		]	Maximum			Other			
Test object ID		Length=		Width=	:	Height=		] ]	nitial zeroing		yes
		unit=		unit=		unit=		(Rea	dy condition)		no
	Instrument										
		Connection		Polarity				Results			
	L	N	PE			Indication					
	↓ ground	↓ ground	↓ ground		L	W	Н	SF* Y/N	SF* Y/N	Result Pass/Fail	Comment
Without disturbance								•			
	X			pos							
				neg							
Without disturbance											
		X		pos							
				neg							
Without disturbance						T	T	1	·		ı
			X	pos							

Notes:
1. SF\* - significant fault detected and acted upon
2. L = Phase, N = Neutral, PE = Protective Earth

neg

## 2.9.1 Power supply lines (A.3.2) (cont'd)

#### **Ancillary device**

	Trifemaly de			D 1 1	I			D 1:			
		Connection		Polarity							
	L	N	PE			Indication					
	$\downarrow$	$\downarrow$	$\downarrow$		I	W	Н	SF*	SF*	Result	Comment
	ground	ground	ground		L	<i>,,</i>	11	Y/N	Y/N	Pass/Fail	
Without disturbance											
	X			pos							
				neg							
Without disturbance											
		X		pos							
				neg							
Without disturbance										•	
			X	pos							
				neg							

Notes:	1. SF* - significant fault detected and acted upon
	2. L = Phase, N = Neutral, PE = Protective Earth

Remarks			
RESULT:	PASS	FAIL	

## 2.9 Electrical bursts (A.3.2)

# 2.9.2 Input / Output circuits and communication lines (A.3.2)

Observer:		***************************************	1			_	At start	At end
Type/application no.:	***************************************		•			Temp (°C)		
Instrument ID:	***************************************		i			RH (%)		
Scale interval (d):						Time		
Conversion factor (F):					- -	Nominal voltage (V)		
						Date		
Ancillary device: Connected		]	Not connected			Not connected		
		_	but connectable		_			
Correct indication of ancillary device		(yes/no)						
Conveyor speed (m/min): Minimum		]	Maximum			Other		]
	•					_		_
Test object ID Length	=	Width=		Height=	=	Initial zeroing		yes
unit	=	unit=		unit=	=	(Ready condition)		no
Connection Polarity			Results			1		
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Indication							
Cable / Interface			SF*	SF*	Result	Comment		
	W	Н	Y/N	Y/N	Pass/Fail			
Without disturbance								
pos								
neg								
Without disturbance								
pos								
neg								
Without disturbance	-	•			-			
pos								
neg								

## 2.9.2 Input / Output circuits and communication lines (A.3.2) (cont'd)

Connection	Polarity		Results								
			Indication								
Cable / Interface		1	W	Н	SF*	SF*	Result	Comment			
		L	,,,	11	Y/N	Y/N	Pass/Fail				
Without disturbance											
	pos										
	neg										
Without disturbance											
	pos										
	neg										
Without disturbance											
	pos										
	neg							·			

Note:	1. SF* - significant fault detected and acted upon

Remarks:				
(Explain or make a	sketch indicating the location of clamp or	the cable).		
			=	
	RESULT:	PASS	FAIL	

## 2.10 Electrostatic disharge (A.3.3)

## 2.10.1 Direct application (A.3.3)

Observer: Type/application no.: Instrument ID: Scale interval (d): Conversion factor (F):			Nominal	Temp (°C)  RH (%)  Time  voltage (V)  Date	At start	At end
Ancillary device:  Correct indication of ancillary device:	Connected	Not connectable but connectable (yes/no)		Date	Not connected	
Conveyor speed (m/min):	Minimum	Maximu	ım		Other	
Contact discharges		Air discharg	es		Paint penetration	
		Polarity	**	positive	negative	
Test object ID	Length= unit=	Width= unit=	Height= unit=		Initial zeroing (Ready condition)	

#### Instrument

	Disturbance		Results							
Test voltage (kV)	No. of discharges	Rep.		Indication						
rest voltage (KV)	No. of discharges	interval (s)	L	W	Н	SF*	SF*	Result	Comment	
	units	-	Y/N Y/N Pass/Fail							
W	ithout disturbance									
2										
4										
6										
8*										

Note:	SF* - significant fault detected and acted upon	

#### 2.10.1 Direct application (A.3.3) (cont'd)

#### **Ancillary device**

	Disturbance					R	esults		
Test voltage (kV)	No. of discharges	Rep.				Inc	dication		
rest voltage (k v)	No. of discharges	interval (s)	L	W	Н	SF*	SF*	Result	Comment
units						Y/N	Y/N	Pass/Fail	
Wi	Without disturbance								
2									
4									
6									
8*									

		Note:	SF* - significant fault detected and acted upon		
Remarks:					
	Notes:		ir discharges	 7	
		2. If the E	EUT fails, recored the test point at which the EUT fails.		

		 •	
RESULT:	PASS	FAIL	i
KESULI.	1 / 100	17111	İ

3. Polarity \*\* - Tests shall be conducted at the most sensitive polarity.

# 2.10 Electrostatic disharge (A.3.3)

### 2.10.2 Indirect application (A.3.3)

Observer: Type/application no Instrument ID: Scale interval (d):	.:						Temp (°C) RH (%) Time		At end	]
Conversion factor (I	F):				n	Nomin	al voltage (V) Date			}
Ancillary device:		Connected			Not connected but connectable			Not connected		]
Correct indication o	f ancillary dev	vice		(yes/no)	out connectable					
Conveyor speed (m/	min):	Minimum			Maximum			Other		]
	Contac	t discharges			Air discharges			Paint penetration		]
					Polarity **		positive	negative		]
Test object ID		Length=		Width=		Height=		Initial zeroing		yes
•		unit=		unit=		unit=		(Ready condition)		no
Horizontal couplin	g plane									
	Disturb	oance					Results			
Test voltage (kV)	No. of di	ischarges	Rep. interval (s)				Indication			
				L	W	Н	SF*	SF*	Result	Comment
	uni	ts					Y/N	Y/N	Pass/Fail	
	Without dis	sturbance								
2										
4										
6										
8*										
			Note:	SF* - :	significant fault d	etected and acted	d upon	]		

## 2.10.2 Indirect application (A.3.3) (cont'd)

**RESULT:** 

**PASS** 

Vertical coupling plane

	Disturbance				Results				
Test voltage (kV)	No. of discharges	Rep. interval (s)		Indication					
			L	W	Н	SF*	SF*	Result	Comment
	units					Y/N	Y/N	Pass/Fail	
	Without disturbance								
2									
4									
6									
8*									

		Note: SF* - significant fault detected and acted upon		
Remarks:				
	Notes:	1. 8* - Air discharges		
		2. If the EUT fails, recored the test point at which the EUT fails.		
		3. Polarity ** - Tests shall be conducted at the most sensitive polarity.		

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**FAIL** 

## 2.10 Electrostatic disharge (A.3.3)

## 2.10.3 Electrostatic discharge additional sheet (A.3.3)

Specifications of test points of EUT, e.g. photos or sketches

a) Direct application	
Contact discharges:	
Air discharges:	
b) Indirect application	
Contact discharges:	
Air discharges:	

# 2.11 Electrical surges (A.3.4)

## 2.11.1 Surges on AC mains

## 2.11.1.1 AC surge voltage at 0° (A.3.4.1)

Type/application no.:					_	At start	At end
Instrument ID:					Temp (°C)		
Scale interval (d):			•		RH (%)		
Conversion factor (F):			'		Time		
	14444144141414144144144144	 	•	Nominal	voltage (V)		
					Date		
Ancillary device:	Connected		Not connected but connectable		]	Not connected	
Correct indication of and	cillary device	(yes/no)	out connectable				
Conveyor speed (m/min	): Minimum		Maximum			Other	
						_	
Test object ID	Length=	Width=		Height=		Initial zeroing	y
	 unit=	unit=		unit=		(Ready condition)	1

## 2.11.1.1 AC surge voltage at 0° (A.3.4.1) (cont'd)

#### Instrument

Connection	Mode	Results						
Test conditions		Indication			SF*	SF*	Result (	Comment
		L	W	Н	Y/N	Y/N	Pass/Fail	
No surge (reference co	ndition)							
Positive								
	L-L							
Negative								
	L-L							
Positive								
	N-PE							
Negative								
	N-PE							
D 12						1		
Positive	I DE		<u> </u>			1		
	L-PE							
NI ('						+		
Negative	L-PE							
	L-PE							
Positive						+		
Positive	L2-PE		+			+		
	L2-FE					+		
Negative								
110541110	L2-PE		+			+ +		
						+ +		

## 2.11.1.1 AC surge voltage at 0° (A.3.4.1) (cont'd)

**Ancillary devices** 

Connection	Mode				Results			
Test conditions		Indication			SF*	SF*	Result	Comment
		L	W	Н	Y/N	Y/N	Pass/Fail	
No surge (reference co	ondition)							
Positive								
	L-L							
Negative								
	L-L							
Positive								
N-PE	N-PE							
Negative								
	N-PE							
B 11								
Positive	I DE							
	L-PE							
N								
Negative	L-PE							
	L-1 E							
Positive								
1 OSITIVE	L2-PE							
Negative	+							
1.00	L2-PE							

Notes:	1. SF* - significant fault detected and acted upon
	2. L-L - Line to Line surge
	3. N-PE - Neutral to Protective Earth surge
	4. L-E - Line to Protective Earth surge
	5. L2-E - Line2 to Protective Earth surge

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2.11.1.1 A	C surge voltage at	0° (A.3.4.1) (cont'd)				
Remarks:						
	<b>RESULT:</b>	PASS		FAIL		

# 2.11 Electrical surges (A.3.4)

## 2.11.1 Surges on AC mains

2.11.1.2 AC surge voltage at 90° (A.3.4.1)

Type/application no.:						At start	At end
Instrument ID:					Temp (°C)		
Scale interval (d):					RH (%)		
Conversion factor (F):					Time		
					Date	;	
Ancillary device:	Connected		Not connected but connectable		]	Not connected [	
Correct indication of ancil	llary device	(yes/no)					
Conveyor speed (m/min):	Minimum		Maximum		]	Other	
Test object ID	Length=	Width=		Height=		Initial zeroing	yes
	unit=	unit=		unit=		(Ready condition)	no

## 2.11.1.2 AC surge voltage at 90° (A.3.4.1) (cont'd)

#### Instrument

Connection	Mode	Results						
Test conditions		Indication			SF*	SF*	Result	Comment
		L	W	Н	Y/N	Y/N	Pass/Fail	
No surge (reference co	ndition)							
Positive								
	L-L							
Negative								
	L-L							
Positive								
	N-PE							
Negative								
	N-PE							
D 11						+		
Positive	I DE					+		
	L-PE							
NI d'a						+		
Negative	L-PE					+		
	L-PE					+		
Positive						+		
Positive	L2-PE					+		
	L2-FE					+		
Negative						+		
110541110	L2-PE				+	+ +		
					+	+ -		

## 2.11.1.2 AC surge voltage at 90° (A.3.4.1) (cont'd)

**Ancillary devices** 

Connection	Mode				Results				
Test conditions		Indication			SF*	SF*	Result	Comment	
		L	W	Н	Y/N	Y/N	Pass/Fail		
No surge (reference co	ondition)								
Positive									
	L-L								
Negative	<u> </u>								
	L-L								
Positive	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
	N-PE								
NI ('									
Negative	N-PE								
	N-PE								
Positive	+								
rositive	L-PE								
Negative	+								
110841110	L-PE								
Positive									
	L2-PE								
Negative									
	L2-PE								

Notes:	1. SF* - significant fault detected and acted upon
	2. L-L - Line to Line surge
	3. N-PE - Neutral to Protective Earth surge
	4. L-E - Line to Protective Earth surge
	5. L2-E - Line2 to Protective Earth surge

2.11.1.2 AC surge voltage at	90° (A.3.4.1) (con	t'd)				
Remarks:						
RESULT:	PASS		7	FAII	,	_

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# 2.11 Electrical surges (A.3.4)

## 2.11.1 Surges on AC mains

2.11.1.3 AC surge voltage at 180° (A.3.4.1)

Type/application no.:						At start	At end
Instrument ID:					Temp (°C)		
Scale interval (d):			•		RH (%)		
Conversion factor (F):		Time					
			•	Nominal	voltage (V)		
					Date		
Ancillary device:	Connected		Not connected but connectable			Not connected [	
Correct indication of ancil	lary device	(yes/no)	000000000000000000000000000000000000000				
Conveyor speed (m/min):	Minimum		Maximum			Other	
Test object ID	Length=	Width=		Height=		Initial zeroing	yes
	unit=	unit=		unit=		(Ready condition)	no

## 2.11.1.3 AC surge voltage at 180° (A.3.4.1) (cont'd)

#### Instrument

Connection	Mode	Results						
Test conditions		Indication			SF*	SF*	Result	Comment
		L	W	Н	Y/N	Y/N	Pass/Fail	
No surge (reference co	ndition)							
Positive								
	L-L							
Negative								
	L-L							
Positive								
	N-PE							
Negative								
	N-PE							
D 11						+		
Positive	I DE					+		
	L-PE							
NI d'a						+		
Negative	L-PE					+		
	L-PE					+		
Positive						+		
Positive	L2-PE					+		
	L2-FE					+		
Negative						+		
110541110	L2-PE				+	+ +		
					+	+ -		

#### 2.11.1.3 AC surge voltage at 180° (A.3.4.1) (cont'd)

**Ancillary devices** 

Connection	Mode	Results						
Test conditions		Indication			SF*	SF*	Result	Comment
		L	W	Н	Y/N	Y/N	Pass/Fail	
No surge (reference co	ondition)							
Positive								
	L-L							
Negative								
	L-L							
Positive								
	N-PE							
Negative	<u> </u>							
	N-PE							
Positive	<u> </u>							
	L-PE							
Negative								
	L-PE							
- · ·								
Positive								
	L2-PE							
3.7								
Negative	12.00							
	L2-PE							

Notes:

1. SF\* - significant fault detected and acted upon
2. L-L - Line to Line surge
3. N-PE - Neutral to Protective Earth surge
4. L-E - Line to Protective Earth surge
5. L2-E - Line2 to Protective Earth surge

OIML R 129-3:2020 (E)	
2.11.1.3 AC surge voltage at 180° (A.3.4.1) (cont'd)	
Remarks:	

**FAIL** 

**RESULT:** 

**PASS** 

# 2.11 Electrical surges (A.3.4)

## 2.11.1 Surges on AC mains

2.11.1.4 AC surge voltage at 270° (A.3.4.1)

Type/application no.:						At start	At end	
Instrument ID:			•		Temp (°C)			
Scale interval (d):			•		RH (%)			
Conversion factor (F):			'		Time			
		 	•	Nominal	voltage (V)			
					Date			
Ancillary device:	Connected		Not connected but connectable			Not connected		
Correct indication of anci	llary device	(yes/no)	out connectable					
Conveyor speed (m/min):	Minimum		Maximum			Other		
Test object ID	Length=	Width=		Height=		Initial zeroing		yes
	unit=	unit=		unit=		(Ready condition)		no

## 2.11.1.4 AC surge voltage at 270° (A.3.4.1) (cont'd)

#### Instrument

Connection	Mode				Results			
Test conditions			Indication		SF*	SF*	Result	Comment
		L	W	Н	Y/N	Y/N	Pass/Fail	
No surge (reference co	ndition)							
Positive								
	L-L							
Negative								
	L-L							
Positive								
	N-PE							
Negative								
	N-PE							
D 11						+		
Positive	I DE					+		
	L-PE							
NI d'a						+		
Negative	L-PE					+		
	L-PE					+		
Positive						+		
Positive	L2-PE					+		
	L2-FE					+		
Negative						+		
110541110	L2-PE				+	+ +		
					+	+ -		

#### 2.11.1.4 AC surge voltage at 270° (A.3.4.1) (cont'd)

**Ancillary devices** 

Connection	Mode				Results			
Test conditions			Indication		SF*	SF*	Result	Comment
		L	W	Н	Y/N	Y/N	Pass/Fail	
No surge (reference co	ondition)							
Positive								
	L-L							
Negative								
	L-L							
Positive								
	N-PE							
Negative								
	N-PE							
B 10								
Positive	I DE							
	L-PE							
NI								
Negative	L-PE							
	L-FE		1					
Positive								
rositive	L2-PE							
	L2-1 E							
Negative								
riogative	L2-PE							

Notes:

1. SF\* - significant fault detected and acted upon
2. L-L - Line to Line surge
3. N-PE - Neutral to Protective Earth surge
4. L-E - Line to Protective Earth surge
5. L2-E - Line2 to Protective Earth surge

OIML R 129-3:2020 (E)	
2.11.1.4 AC surge voltage at 270° (A.3.4.1) (cont'd)	
Remarks:	_

**FAIL** 

**RESULT:** 

**PASS** 

## 2.11 Electrical surges (A.3.4)

# 2.11.2 Surges on signal, data and control lines (A.3.4.2)

Type/application no.:						T (0G)	At start	At end
Instrument ID:			***************************************			Temp (°C)		
Scale interval (d):						RH (%)		
Conversion factor (F):	***************************************		***************************************	100		Time		
					Nomir	nal voltage (V)		
						Date		
Ancillary device:	Connected			Not connected but connectable			Not connected [	
Correct indication of ancil	lary device		(yes/no)	out connectable				
Conveyor speed (m/min):	Minimum			Maximum			Other	
Test object ID	Length=		Width=	=	Height=		Initial zeroing	yes
	unit=		unit=	=	unit=		(Ready condition)	no
	•		•	•				<del></del>
Instrument								
Connection	Mode				Results			
Test conditions			Indication	1	SF*	SF*	Result	Comment
		L	W	Н	Y/N	Y/N	Pass/Fail	
No surge (reference condit	cion)							
Positive								
	L-L							
Negative								
	L-L							
Positive								
	N-PE							
Negative								
	N-PE							

	Notes:	1. SF* - significant fault detected and acted upon	
		2. L-L - Line to Line surge	
		3. L-E - Line to Earth surge	
Remarks			

FAIL

RESULT:

PASS

# 2.12 Immunity to RF electromagnetic fields (A.3.5)

## 2.12.1 Radiated RF electromagnetic fields (A.3.5.1)

Observer: Type/application Instrument ID: Scale interval (d) Conversion factor	:					Nomina	Temp (°C) RH (%) Time l voltage (V)		At end	
	- (- )-				п		Date			
Ancillary device:		Connected		]	Not connected but connectable			Not connected		
Correct indication	n of ancillary do	evice		(yes/no)						
Conveyor speed (	(m/min):	Minimum		]	Maximum			Other		
	Ra	te of sweep:								
Test object ID	1	Length=		Width=		Height=		]	Initial zeroing	ye
•		unit=		unit=		unit=		(Re	eady condition)	no
	Disturb	ance					Results			
					Indication					
Antenna	Frequency range	Antenna polarisation	Facing EUT	L	W	Н	SF* Y/N	SF* Y/N	Result Pass/Fail	Comment
	Without dis	L turbance	<u> </u>				1/11	1/14	1 455/1 411	
	Williout dis		Front		ΙΙ			I		
			Right							
		Vertical	Left							
			Rear							
	Without dis	turbance								
			Front							
		Horizontal	Right							
		Horizontai	Left							
			Rear							
			Notes:	1. SF* - signi	ficant fault detecte	d and acted up	on	]		

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2.12.1 Radiated	l RF electromagnetic fiel	lds (A.3.5.1)	(cont'd)			
Frequency range: Field strength:	26 MHz to 2000 MHz 10 V/m					
	80 % Am, 1 KHz sine wave					
Remarks:						
	RESULT:	PASS		FAIL		

2.12 Immunity to RF electromagnetic fields (A.3.5) 2.12.1 Radiated RF electromagnetic fields (A.3.5.1) (cont'd)
1. Description of the setup of the EUT, e.g. by photos, sketches, etc.
2. Additional remarks
L

### 2.12 Immunity to RF electromagnetic fields (A.3.5)

### 2.12.2 Conducted RF electromagnetic fields (A.3.5.2)

Observer: Type/application r Instrument ID: Scale interval (d): Conversion factor						Nomin	Temp (°C) RH (%) Time al voltage (V) Date		At end		
Ancillary device:		Connected		]	Not connected but connectable			Not connected			
Correct indication	of ancillary de	evice		(yes/no)							
Conveyor speed (r	m/min):	Minimum		]	Maximum			Other			
	Ra	te of sweep:		]							
Test object ID		Length=	=	Width=		Height=			Initial zeroing		yes
		unit=		unit=		unit=		(Re	eady condition)		no
Disturbance	l .				Res	ults					İ
Frequency	6.1	10 1 1			Indication						
MHz	Observe	ed fault during	exposure	L	W	Н	SF*	SF*	Result	Comment	
	Without dist	turbance					Y/N	Y/N	Pass/Fail		l
											l
											l
											ł
											ł
											ł
	l			l .					1 1		I

1. SF\* - significant fault detected and acted upon

Notes:

2.12.2 Conduct	ed RF electromagnetic fi	ields (A.3.5.2)	) (cont'd)			
Frequency range: Field strength:	0.15 MHz to 80 MHz 10 V/m					
Modulation:	80 % Am, 1 KHz sine wave	e				
Remarks:						
	<b>RESULT:</b>	PASS		FAIL		

### **2.13** Ambient light (A.4.1)

### 2.13.1 Reference conditions 200 lx to 500 lx (A.4.1)

Observer: Type/applicatio Instrument ID: Scale interval (o Conversion fact	d):				  	Temp (°C) RH (%) Time Light (lx) Date		At end	
Ancillary device		Connected		]	Not connected but connectable			Not connected	
Correct indicati	on of ancillary	device		(yes/no)					
Conveyor speed	l (m/min):	Minimum		]	Maximum			Other	
Test object ID	Length (units)	Width (units)	Height (units)						
1				]					
2				1					
3				]					
4									
5				]					
Test object ID	Initial zeroing (yes/no)	L (units)	$\Delta L$	W (units)	$\Delta W$	H (units)	ΔН	mpe	Pass/Fail
1	Í								
2									
3									
4									
5									
Remarks					•				
	RESULT:		PASS		]	FAIL			

## **2.13** Ambient light (A.4.1)

## 2.13.2 Ambient light 100 lx (A.4.1)

Observer: Type/application no.: Instrument ID: Scale interval (d): Conversion factor (F):					Temp (°C) RH (%) Time Light (lx) Date				
Ancillary device:  Correct indication of ancillary		Connected			Not connected but connectable			Not connected	
Correct indicate	ion of ancillary of	device		(yes/no)					
Conveyor speed	d (m/min):	Minimum			Maximum			Other	
Test object ID	Length (units)	Width (units)	Height (units)						
1									
3			+						
4			1						
5									
Test object ID	Initial zeroing (yes/no)	L (units)	$\Delta L$	W (units)	$\Delta W$	H (units)	$\Delta H$	mpe	Pass/Fail
1									
2			1		+				
3 4			+		1				
5			+						
Remarks			ı		I			l	
	RESULT:		PASS		]	FAIL		]	

## **2.13** Ambient light (A.4.1)

### 2.13.3 Ambient light 1000 lx to 1500 lx (A.4.1)

Observer: Type/application no.: Instrument ID: Scale interval (d): Conversion factor (F):					  	Temp (°C) RH (%) Time Light (lx) Date	At start	At end	
Ancillary device:		Connected			Not connected but connectable			Not connected	
Correct indicate	ion of ancillary	device		(yes/no)	out connectable				
Conveyor speed (m/min):		Minimum			Maximum			Other	
Test object ID  1 2 3 4 5	Length (units)	Width (units)	Height (units)						
Test object ID	Initial zeroing (yes/no)	L (units)	ΔL	W (units)	$\Delta W$	H (units)	$\Delta H$	mpe	Pass/Fail
2									
3									
4									
5	]								
Remarks									
	RESULT:		PASS		]	FAIL [		]	

#### **2.13** Ambient light (A.4.1)

#### 2.13.4 Ambient light, other lx (A.4.1)

Observer: Type/application no.: Instrument ID: Scale interval (d): Conversion factor (F):					  	Temp (°C) RH (%) Time Light (lx) Date	At start	At start At end			
Ancillary device	ee:	Connected		]	Not connected but connectable			Not connected			
Correct indicate	ion of ancillary o	device		(yes/no)	out connectable	ic					
Conveyor speed	d (m/min):	Minimum		]	Maximum			Other			
Test object ID  1 2 3	Length (units)	Width (units)	Height (units)								
5											
Test object ID	Initial zeroing (yes/no)	L (units)	$\Delta L$	W (units)	$\Delta W$	H (units)	ΔН	mpe	Pass/Fail		
3											
4											
5 Remarks											
	RESULT:		PASS			FAIL [					

2.13 Ambient light (A.4.1)
2.13.5 Additional sheet (A.4.1)
1. Description of the setup of the EUT, e.g. photos or sketches
2. Additional remarks
2. Additional remarks

#### 2.14 Acoustics (A.4.2)

#### 2.14.1 Reference sound level (dB) (A.4.2)

Observer: Type/application no.: Instrument ID: Scale interval (d): Conversion factor (F):					  	At start At end  Temp (°C)  RH (%)  Time  Sound (dB)  Date				
-	Ancillary device: Correct indication of ancillary de		Connected (yes/no)		Not connected but connectable			Not connected		
Conveyor speed (m/min):		Minimum			Maximum			Other		
Test object ID  1 2 3 4	Length (units)	Width (units)	Height (units)							
5 T. ( 1) ( ID.	Initial zeroing	L	$\Delta L$	] 	ΔW	Н	ΔΗ	mpe	Pass/Fail	
Test object ID  1 2	(yes/no)	(units)		(units)		(units)				
3 4 5										
Remarks										
	RESULT:		PASS		]	FAIL		]		

#### 2.14 Acoustics (A.4.2)

#### 2.14.2 100 dB sound level (dB) (A.4.2)

Observer: Type/application no.: Instrument ID: Scale interval (d): Conversion factor (F):					 	At start At end  Temp (°C)  RH (%)  Time  Sound (dB)  Date				
Ancillary device: Co		Connected		]	Not connected but connectable			Not connected		
Correct indication	on of ancillary de	evice		(yes/no)						
Conveyor speed	l (m/min):	Minimum		]	Maximum			Other		
Test object ID	Length (units)	Width (units)	Height (units)							
1										
2										
3 4				-						
5				-						
				J						
Test object ID	Initial zeroing (yes/no)	L (units)	ΔL	W (units)	$\Delta W$	H (units)	ΔН	mpe	Pass/Fail	
1	,	, ,								
2										
3										
4					1					
5										
Remarks										
	RESULT:		PASS			FAIL		]		
					<del>_</del>	•		=		

2.14 Acoustic test (A.4.2) 2.14.3 Additional sheet	
Description of the setup of the EUT, e.g. photos or sketches	
1. Description of the setup of the EO1, e.g. photos of sketches	
2. Additional remarks	

# 2.15 Shape of the object (A.1.6)

Observer: Type/application Instrument ID: Scale interval (conversion fact	l):					Temp (°C) RH (%) Time Date	At start	At end		
Ancillary device	e:	Connected		]	Not connected			Not connected		
Correct indication	on of ancilla	ry device		(yes/no)	but connectable					
Conveyor speed	(m/min):	Minimum		]	Maximum			Other		
Test object ID			Length = unit =		Width = unit =		Height = unit =		Initial zeroing (Ready condition)	yes
Run (units)	L	ΔL	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail		
1										
3										
3				l		L				
Test object ID			Length =		Width =		Height =		Initial zeroing	yes
			unit =		unit =		unit =		(Ready condition)	no
Run (units)	L	$\Delta L$	W	ΔW	Н	ΔΗ	mpe	Pass/Fail		
1										
3										

# 2.15 Shape of the object (A.1.6) (cont'd)

Test object ID			Length =		Width =		Height =		Initial zeroing	yes
		-	unit =		unit =		unit =		(Ready condition)	no
			T	1				D /E !!		
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail		
(units)										
1										
2										
3										
Test object ID			Length =		Width =		Height =		Initial zeroing	yes
, _		1	unit =		unit =		unit =		(Ready condition)	no
				<u> </u>					,	
Run	L	$\Delta L$	W	$\Delta W$	Н	ΔH	mpe	Pass/Fail		
(units)										
1										
2										
3										
		_			_		_			
Test object ID		]	Length =		Width =		Height =		Initial zeroing	yes
			unit =		unit =		unit =		(Ready condition)	no
		_					_			
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail		
(units)										
1										
2										
_										

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2.15 Shape of the object (A.1.6) (cont'd)	
Remarks	_

**FAIL** 

**RESULT:** 

**PASS** 

# 2.16 Uniform surface colour (A.1.6)

Observer: Type/application Instrument ID: Scale interval (d Conversion factor	):					Temp (°C) RH (%) Time Date	At start	At end		
Ancillary device	<b>::</b>	Connected		]	Not connected but connectable			Not connected		
Correct indication	on of ancilla	ary device		(yes/no)	but connectable	•				
Conveyor speed	(m/min):	Minimum		]	Maximum			Other		
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing dy condition)	yes no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail		
1									]	
3									-	
		1		•				•	1	
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing dy condition)	yes no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail	]	
1	_						_			
3		+						<u> </u>	-	
3								1		

3

# 2.16 Uniform surface colour (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =		I	nitial zeroing	yes
		unit =		unit =		unit =		(Rea	dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail	]	
1										
3									]	
		1							1	
Test object ID		Length =		Width =		Height =			nitial zeroing	yes
		unit =		unit =		unit =		(Rea	dy condition)	no
Run	L	$\Delta L$	W	$\Delta W$	Н	ΔH	mpe	Pass/Fail	]	
(units)									-	
2		+ +							1	
3										
•									•	
Test object ID		Length =		Width =		Height =		] 1	nitial zeroing	yes
		unit =		unit =		unit =			dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail	]	
1										
2									]	

2.16 Unif	orm surface colour (	(A.1.6) (cont	<b>d</b> 'd)			
Remarks						
	<b>RESULT:</b>	PASS		FAIL		

# 2.17 Non uniform surface colour (A.1.6)

Observer: Type/application Instrument ID: Scale interval (d Conversion factor	):					Temp (°C) RH (%) Time Date	At start	At end		
Ancillary device	:	Connected		]	Not connected			Not connected		
Correct indication	on of ancillar	ry device		(yes/no)	but connectable					
Conveyor speed	(m/min):	Minimum		]	Maximum			Other		
Test object ID		Length =		Width =		Height =			nitial zeroing	yes
		unit =		unit =		unit =		(Read	dy condition)	no
Run (units)	L	ΔL	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail		
2										
Test object ID		Length =		Width =		Height =			nitial zeroing	yes
		unit =		unit =		unit =		(Read	dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail		
2		+ +								
3		+ +								

# 2.17 Non uniform surface colour (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =		I	nitial zeroing	yes	
		unit =		unit =		unit =		(Read	dy condition)	no	
						_			- -		
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail			
(units)											
1											
2											
3											
m . 11 . m		1 1		1 1		1	ı	1 .		ye	
Test object ID		Length =		Width =		Height =			Initial zeroing		
	unit =			unit =		unit =		(Read	dy condition)	no	
				<del> </del>		1	1	T	Ī		
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail			
(units)											
1											
2											
3											
m . 11 . m l		T T		T 1		T	ı	1 .			
Test object ID		Length =		Width =		Height =			nitial zeroing	ye	
		unit =		unit =		unit =		(Read	dy condition)	no	
						1	Г	I	Ī		
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail			
(units)				<u> </u>							
1											
2		1		1		I	ľ	I	I		

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	_							

2.17 Non uniform	surface colour (A.1.6	6) (cont'd)			
Remarks					
RESU	LT: PASS		FAIL		

# 2.18 Contrast of colour with background colour (A.1.6)

Observer: Type/application Instrument ID: Scale interval (d Conversion factor	l):					Temp (°C) RH (%) Time Date	At start	At end		
Ancillary device	»:	Connected			Not connected but connectable			Not connected		
Correct indication	on of ancilla	ry device		(yes/no)	out connectable					
Conveyor speed	(m/min):	Minimum		]	Maximum			Other		
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing dy condition)	ye: no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔΗ	mpe	Pass/Fail		
1										
3		+ +								
3		<u> </u>		<u> </u>				. <b>L</b>	I	
Test object ID		Length =		Width =		Height =			nitial zeroing	yes
		unit =		unit =		unit =		(Rea	dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔΗ	mpe	Pass/Fail		
1								-		
3										

3

#### 2.18 Contrast of colour with background colour (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =		I	nitial zeroing	yes
		unit =		unit =		unit =		(Rea	dy condition)	no
							1	T D /D !!	7	
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail		
(units)									-	
1										
2										
3									]	
Test object ID		Length =		Width =		Height =		1 <sub>1</sub>	nitial zeroing	yes
Test object ID	Test object ID			unit =		unit =		(Ready condition)		no
				uiiit –		unit –		(Rea	dy condition)	110
Run	L	$\Delta L$	W	ΔW	Н	ΔН	mpe	Pass/Fail	1	
(units)	L	22	,,	2,,,	11			1 455/1 411		
1									1	
2									1	
3										
				1		1		1	1	
Test object ID		Length =		Width =		Height =		] 1	nitial zeroing	yes
· •		unit =		unit =		unit =			dy condition)	no
							I	`	,	
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail	1	
(units)										
1										
2									1	

2.18 Co	2.18 Contrast of colour with background colour (A.1.6) (cont'd)									
Remarks										
	RESULT:	PASS		FAIL						

# 2.19 Surface reflectivity and absorption of sound (A.1.6)

Observer: Type/applicatio Instrument ID: Scale interval (a Conversion fact	d):					Temp (°C) RH (%) Time Date	At start	At end		
Ancillary devic	e:	Connected		]	Not connected			Not connected		
Correct indicati	on of ancilla	ry device		(yes/no)	but connectable					
Conveyor speed	d (m/min):	Minimum [		]	Maximum			Other		
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing dy condition)	ye: no
Run (units)	L	ΔL	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail		
2										
3				<u> </u>					]	
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing dy condition)	yes
D	1 7	41	ш	4117	11	ATT		D/E-:1	1	
Run (units)	L	ΔL	W	∆W	Н	ΔН	mpe	Pass/Fail		
1 2									-	
2									1	

# 2.19 Surface reflectivity and absorption of sound (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =			Initial zeroing	yes
		unit =		unit =		unit =		(Rea	ndy condition)	no
									7	
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail		
(units)									_	
1									_	
2									_	
3										
T ( 1: (ID)		T .1		337' 1.1		TT : 1.		1 ,	1.20.1-	
Test object ID		Length =		Width =		Height =			Initial zeroing	yes
	unit =			unit =		unit =		(Rea	ady condition)	no
Run	L	$\Delta L$	W	$\Delta W$	Н	ΔH	mne	Pass/Fail	7	
(units)	L	$\Delta L$	VV	Z1 VV	Π	ΔП	mpe	rass/raii		
(units)		+		+		+			-	
2		+		+ +		+			-	
3		+		+ +		+			-	
3				1 1					_	
Test object ID		Length =		Width =		Height =		<b>]</b>	Initial zeroing	yes
· _		unit =		unit =		unit =			ndy condition)	no
								`	, ,	
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail	]	
(units)										
1									]	
2									7	

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2.19 Surface reflectivity and absorption of sound (A.1.6) (cont'd)									
Remarks									
RESULT:	PASS	FAIL							

# 2.20 Surface reflectivity and absorption of light (A.1.6)

Observer: Type/applicatio Instrument ID: Scale interval (a Conversion fact	d):				•	Temp (°C) RH (%) Time Date	At start	At end		
Ancillary devic	e:	Connected		]	Not connected but connectable			Not connected		
Correct indicati	on of ancilla	ary device		(yes/no)	but connectable					
Conveyor speed	l (m/min):	Minimum		]	Maximum			Other		
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing dy condition)	ye no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail		
1 2										
3										
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing dy condition)	ye no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔΗ	mpe	Pass/Fail		
1										
3										

# 2.20 Surface reflectivity and absorption of light (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =			Initial zeroing	yes
		unit =		unit =		unit =		(Rea	ndy condition)	no
D.	7	4.7	$\overline{W}$	ATIV	Н	AII		Pass/Fail	7	
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fall		
(units)									_	
2									_	
3										
3		I L								
Test object ID		Length =		Width =		Height =		] ]	Initial zeroing	yes
- <u>-</u>		unit =		unit =		unit =		(Ready condition)		no
		•		•			<u>.</u>	•		
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail		
(units)										
1										
2										
3										
Test object ID		Length =		Width =		Height =		7 1	Initial zeroing	yes
rest object ID		unit =		unit =		unit =			dy condition)	no
		um –		umi –		unit –		(Rea	idy condition)	IIO
Run	L	$\Delta L$	W	$\Delta W$	Н	ΔH	mpe	Pass/Fail		
(units)										
1									1	
2										
		1 1		<del>1                                    </del>			i	i e	7	

2.20 Surface reflectivity and absorption of light (A.1.6) (cont'd)										
Remarks										
F	RESULT:	PASS		FAIL						

# 2.21 Uniformity of density (A.1.6)

Observer: Type/application Instrument ID: Scale interval (d) Conversion factor	):					Temp (°C) RH (%) Time Date	At start	At end		
Ancillary device	:	Connected			Not connected [but connectable			Not connected		
Correct indication	n of ancill	ary device		(yes/no)	but connectable					
Conveyor speed	(m/min):	Minimum		]	Maximum			Other		
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroingdy condition)	yes no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail		
2								1		
3									]	
								<b>-</b>	·	
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroingdy condition)	yes no
		unit –		unit –		unit –		(Itea	ay condition)	
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔΗ	mpe	Pass/Fail		
1									]	
2		+							-	

# 2.21 Uniformity of density (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =		]	Initial zeroing	yes	
		unit =		unit =		unit =		(Rea	ndy condition)	no	
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail			
1											
3									_		
3								<u>l</u>	_		
Test object ID		Length =		Width =		Height =		7	Initial zeroing	vec	
Test object ID	rest object ID			unit =		unit =			Initial zeroing yes (Ready condition) no		
		unit =		unit –		unit –		(Rea	idy condition)	no	
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail	]		
(units)											
1											
2											
3											
Test object ID		Length =		Width =		Height =		]	Initial zeroing	yes	
		unit =		unit =		unit =		(Rea	ndy condition)	no	
									7		
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail			
(units)									4		
1									_		

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2.21 Uniformity of density (A.1.6) (cont'd)
Remarks

Remarks					
	RESULT:	PASS		<b>FAIL</b>	

# 2.22 Transparency (A.1.6)

Observer: Type/application		11000010001000010000			m m	Temp (°C)	At start	At end		
Instrument ID:			***************************************			RH (%)				
Scale interval ( Conversion fac						Time Date				
Ancillary device	ce:	Connected			Not connected but connectable			Not connected		
Correct indicat	ion of ancilla	ary device		(yes/no)	out connectable					
Conveyor spee	d (m/min):	Minimum			Maximum			Other		
Test object ID		Length =		Width =		Height =		] I:	nitial zeroing	yes
	•	unit =		unit =		unit =		(Read	dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail		
1										
3		+ +								
3					<u>l</u>			.1	I	
Test object ID		Length =		Width=		Height =			nitial zeroing	yes
		unit =		unit =		unit =		(Read	dy condition)	no
				T	•				1	
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔΗ	mpe	Pass/Fail		
1										
2		1								
3										

3

# 2.22 Transparency (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =		I	nitial zeroing	yes
		unit =		unit =		unit =		(Rea	dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail		
1										
3									-	
		l		I			l	I	J	
Test object ID		Length =		Width =		Height =			nitial zeroing	yes
		unit =		unit =		unit =		(Rea	dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail	]	
1									<u> </u>	
2										
3									J	
Test object ID		Length =		Width =		Height =			nitial zeroing	yes
		unit =		unit =		unit =		(Rea	dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail		
1										
2	<u> </u>									

2.22 Transparency (A	.1.6) (cont'd)			
Remarks				
RESULT:	PASS	FAIL		

# 2.23 Surface roughness (A.1.6)

Observer: Type/application Instrument ID: Scale interval (conversion fact	l):				· · ·	Temp (°C) RH (%) Time Date	At start	At end		
Ancillary device	e:	Connected [		]	Not connected but connectable			Not connected		
Correct indication	on of ancilla	ry device		(yes/no)	out connectable					
Conveyor speed	l (m/min):	Minimum		]	Maximum			Other		
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing	yes no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail		
1										
3										
		1		<u> </u>						
Test object ID		Length =		Width =		Height =			nitial zeroing	yes
		unit =		unit =		unit =		(Read	dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔΗ	mpe	Pass/Fail		
1										
2		<del>                                     </del>								

# 2.23 Surface roughness (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =		] 1	nitial zeroing	yes
		unit =		unit =		unit =		(Rea	dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔΗ	mpe	Pass/Fail		
1										
3									-	
				]				<u> </u>	J	
T4 -1:4 ID		T 41		VV' 1/1		11 14		1 ,	:.:a:-1:	
Test object ID		Length =		Width =		Height =			nitial zeroing dy condition)	yes
		unit =		unit =		unit =		(Rea	dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		] 1	nitial zeroing	yes
		unit =		unit =		unit =		(Rea	dy condition)	no
		1 1				1 (22 1		D /E 1	1	
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail		
1				1		+			1	
2									1	

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2.23 Surface roughness (A.1.6) (cont'd)	
Remarks	

**FAIL** 

**RESULT:** 

**PASS** 

# 2.24 Protrusions on surface (A.1.6)

Observer:							At start	At end		
Type/application	n no.:				П	Temp (°C)			]	
Instrument ID:					П	RH (%)			1	
Scale interval (d	d):				п	Time			1	
Conversion fact					п	Date			1	
					1	-			•	
Ancillary device	e:	Connected			Not connected			Not connected		
		_		-	but connectable					
Correct indication	on of ancilla	ry device		(yes/no)						
		_		-						
Conveyor speed	l (m/min):	Minimum			Maximum			Other		
								_		
Test object ID		Length =		Width =		Height =			nitial zeroing	ye
		unit =		unit =		unit =		(Read	dy condition)	nc
				T	T				1	
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail		
(units)										
1										
2										
3									]	
m . 1: .m		1 - 1		*****	ı	** * 1 .		٦ ,		
Test object ID		Length =		Width =		Height =			nitial zeroing	ye
		unit =		unit =		unit =		(Read	dy condition)	nc
D	ī	41	III	AIII	11	ATT		Pass/Fail	1	
Run	L	$\Delta L$	W	$\Delta W$	Н	ΔΗ	mpe	Pass/Fall		
(units)		+							-	
2		+ +							1	
2		+							1	

3

# 2.24 Protrusions on surface (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =		I	nitial zeroing	yes
		unit =		unit =		unit =		(Rea	dy condition)	no
		1 /- 1		I (****				D /E 1	1	
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail		
(units)										
1						ļ				
2										
3									]	
Test object ID		Length =		Width =		Height =		П т	nitial zeroing	yes
rest object ID		unit =		unit =		unit =			dy condition)	no
		unit		unit		unit		(Itea	ay condition)	
Run	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail	]	
(units)							_			
1										
2										
3										
•		•		•	•	•	•	•	•	
Test object ID		Length =		Width =		Height =		I	nitial zeroing	yes
_		unit =		unit =		unit =		(Rea	dy condition)	no
								_		
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail		
(units)										
1										
2										

2.24 Protr	rusions on surface (A	.1.6) (cont'	d)			
Remarks						
	RESULT:	PASS		FAIL		

#### 2.25 Orientation and position (A.1.6)

Observer: Type/application Instrument ID: Scale interval (d Conversion factor	l):					Temp (°C) RH (%) Time Date	At start	At end		
Ancillary device	e:	Connected		]	Not connected but connectable			Not connected		
Correct indication	on of ancillar	ry device		(yes/no)	out connectable					
Conveyor speed	(m/min):	Minimum		]	Maximum			Other		
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing dy condition)	ye: no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mpe	Pass/Fail		
2 3										
								_	_	
Test object ID		Length =		Width =		Height =			nitial zeroing	yes
		unit =		unit =		unit =		(Read	dy condition)	no
Run (units) 1 2	L	ΔL	W	$\Delta W$	Н	ΔΗ	mpe	Pass/Fail		
2										

# 2.25 Orientation and position (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =		I	nitial zeroing	ye
		unit =		unit =		unit =		(Rea	dy condition)	no
Run (units)	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail	]	
1										
2									1	
3									]	
									_	
Test object ID		Length =		Width =		Height =			nitial zeroing	ye
		unit =		unit =		unit =		(Rea	dy condition)	no
I		1 47 1	***	1 4777	***	1 /** 1		I b /5 11	7	
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail		
(units)		1		+		+		<u> </u>	1	
2									-	
3									-	
3		1		1				<u> </u>	1	
Test object ID		Length =		Width =		Height =		I	nitial zeroing	yε
<u></u>		unit =		unit =		unit =		(Rea	dy condition)	no
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail		
(units)									1	
1										

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2.25 Orientation and position	n (A.1.6) (cont'd)		
Remarks			
RESULT:	PASS	FAIL	

# 2.26 Test for speed of relative movement (A.1.6)

#### **2.26.1** Minimum speed (A.1.6)

Observer:							At start	At end		
Type/application	n no.:					Temp (°C)				
Instrument ID:						RH (%)				
Scale interval (d	d):					Time				
Conversion fact	or (F):					Date				
		_								
Ancillary device	e:	Connected		]	Not connected			Not connected		
		-		_	but connectable					
Correct indication	on of ancilla	ry device		(yes/no)						
		ъ Г		1						
Conveyor speed	l (m/mın):	Minimum		]	Maximum			Other		
T ( 1: (ID		T (1		337' 14		TT : 1.		٦ ,	20.1	
Test object ID		Length =		Width =		Height =			nitial zeroing	yes
		unit =		unit =		unit =		(Read	dy condition)	no
Run	L	$\Delta L$	W	$\Delta W$	Н	ΔН	mne	Pass/Fail	ĺ	
(units)	L	$\Delta L$	VV	Z1	11	2111	mpe	1 455/1 411		
1										
2										
3										
		!!		<u>!</u>		<u> </u>		-		
Test object ID		Length =		Width =		Height =		] In	nitial zeroing	yes
,		unit =		unit =		unit =			dy condition)	no
		•		•		*				
Run	L	$\Delta L$	W	$\Delta W$	Н	ΔΗ	mpe	Pass/Fail		
(units)										
1										
2										
3										

3

# **2.26.1** Minimum speed (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =		I	nitial zeroing	yes
_		unit =		unit =		unit =		(Rea	dy condition)	no
Run	L	$\Delta L$	$\overline{W}$	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail	1	
(units)	L		,,	Δ,,,	11		p •	1 455, 1 411		
1									1	
2										
3										
Test object ID		Length =		Width =		Height =		] <sub>1</sub>	nitial zeroing	yes
rest object ID		unit =		unit =		unit =			dy condition)	no
		umi		umi		unit				
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail		
(units)										
1										
2										
3									]	
Test object ID		Length =		Width =		Height =		] 1	nitial zeroing	yes
<u>-</u>		unit =		unit =		unit =		(Rea	dy condition)	no
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail		
(units)										
1										
2									]	

2.26.1 Minimum speed (A.1.6)	) (cont'd)		
Remarks			
RESULT:	PASS	FAIL	

# 2.26 Test for speed of relative movement (A.1.6)

#### **2.26.2 Maximum speed (A.1.6)**

Observer: Type/application Instrument ID: Scale interval (d Conversion factor	l):					Temp (°C) RH (%) Time Date	At start	At end		
Ancillary device	<b>:</b> :	Connected			Not connected [			Not connected		
Correct indication	on of ancilla	ry device		(yes/no)	out connectable					
Conveyor speed	(m/min):	Minimum		]	Maximum			Other		
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing	yes no
Run (units)	L	$\Delta L$	W	ΔW	Н	ΔΗ	mpe	Pass/Fail		
2 3										
3		1		<u> </u>						
Test object ID		Length = unit =		Width = unit =		Height = unit =			nitial zeroing dy condition)	yes no
Run (units)	L	$\Delta L$	W	ΔW	Н	ΔΗ	mpe	Pass/Fail		
1										
3										

# 2.26.2 Maximum speed (A.1.6) (cont'd)

Test object ID		Length =		Width =		Height =		Iı	nitial zeroing	ye
		unit =		unit =		unit =		(Read	dy condition)	no
								D /D 11		
Run	L	$\Delta L$	W	$\Delta W$	H	$\Delta H$	mpe	Pass/Fail		
(units)				1						
1				1						
2										
3				1						
Test object ID		Length =		Width =		Height =		1 I	nitial zeroing	ye
		unit =		unit =		unit =			dy condition)	no
		unit		umt		difft		_ (Itout	ay condition)	
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail		
(units)				1						
1										
2										
3										
•		•		•				•		
								_		
Test object ID		Length =		Width =		Height =			nitial zeroing	ye
-		unit =		unit =		unit =		(Read	dy condition)	no
								_		
Run	L	$\Delta L$	W	$\Delta W$	Н	$\Delta H$	mpe	Pass/Fail		
(units)										
1								1		

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26.2 Maximum speed (A.1.6) (cont'd)	
20.2 Maximum speed (A.1.0) (cont d)	
emarks	_

Remarks				
	<b>RESULT:</b>	PASS	FAIL	

# 2.27 Examination of the construction of instrument (R 126-1, 5.1.2)

Use this page to indicate any description or information pertaining to the instrument, additional to that already contained in this report and in the accompanying certificate of approval or OIML certificate.  This may include a pictures of the complete instrument, a description of its main components and any remark which could be useful for initial or subsequent verisifications of individual instruments built according to the pattern. It may also include references to the manufacturer's description.									
RESULT:	PASS [		FAIL						