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OIML R 129-3

Multi-dimensional measuring instruments

Part 3: Test Report Format

TITRE DU CD (French):

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Instruments de mesure multidimensionnels

Partie 3: Format de Rapport pour l'examen de type

Original version in: English

Table of Contents

Foreword 2

Explanatory notes to the test report format 3

COVER PAGE BY ISSUING AUTHORITY (NATIONAL RESPONSIBLE BODY) 4

Table of contents – Test Report Format 5

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 two 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; the OIML Member States shall implement these Recommendations to the greatest possible extent;
- **International Documents (OIML D)**, which are informative in nature and intended to improve the work of the metrological services.

OIML Draft Recommendations and Documents are developed by technical committees or subcommittees which are formed by the Member States. Certain international and regional institutions also participate on a consultation basis.

Cooperative agreements are established between OIML and certain institutions, such as ISO and IEC, with the objective of avoiding contradictory requirements; consequently, manufacturers and users of measuring instruments, test laboratories, etc. may apply simultaneously OIML publications and those of other institutions.

International Recommendations and International Documents are published in French (F) and English (E) and are subject to periodic revision.

This publication – reference OIML R 129-3, Edition 20xx – was developed by Project Group 1 of OIML TC 7/SC 5 *Dimensional Measuring Instruments*. It was approved for final publication by the International Committee of Legal Metrology in 20xx and will be submitted to the International Conference of Legal Metrology in 20xx for formal sanction.

OIML publications may be downloaded from the OIML website in the form of PDF files. Additional information on OIML Publications may be obtained from the Organization's headquarters:

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Multi-dimensional measuring instruments

Part 3 - Test Report Format for Type Evaluation

EXPLANATORY NOTES TO THE TEST REPORT FORMAT

General

This Test report format, which is informative with regard to the implementation of OIML Recommendation R 129 in national regulations, presents a standardized format for the results of the various tests and examinations to which a type of a multi-dimensional measuring instrument shall be submitted with a view to its approval. The tests are listed in Annex A of this International Recommendation.

It is recommended that all metrology services or laboratories evaluating types of multi-dimensional measuring instruments according to OIML R 129 or to national or regional regulations based on OIML R 129 use this Test report format, directly or after translation into a language other than English or French.

It is also recommended that this Test report format in English or in French (or in both languages) be transmitted by the country performing these tests to the relevant authorities of another country, under bi- or multi-lateral cooperation agreements.

In the framework of the OIML Certificate System for Measuring Instruments, use of the Test report format is mandatory.

Page numbering

In addition to the sequential numbering at the bottom of each page, a space has been left at the top of each page (starting on page 27) for numbering the pages of reports established following this model. In particular, each test is reported individually on a separate page following the relevant format.

Where required, these forms can be copied and used several times in cases where the test in question has to be repeated under varying conditions.

For a given report, it is advisable to complete the sequential numbering of each page by indicating the total number of pages in the report.

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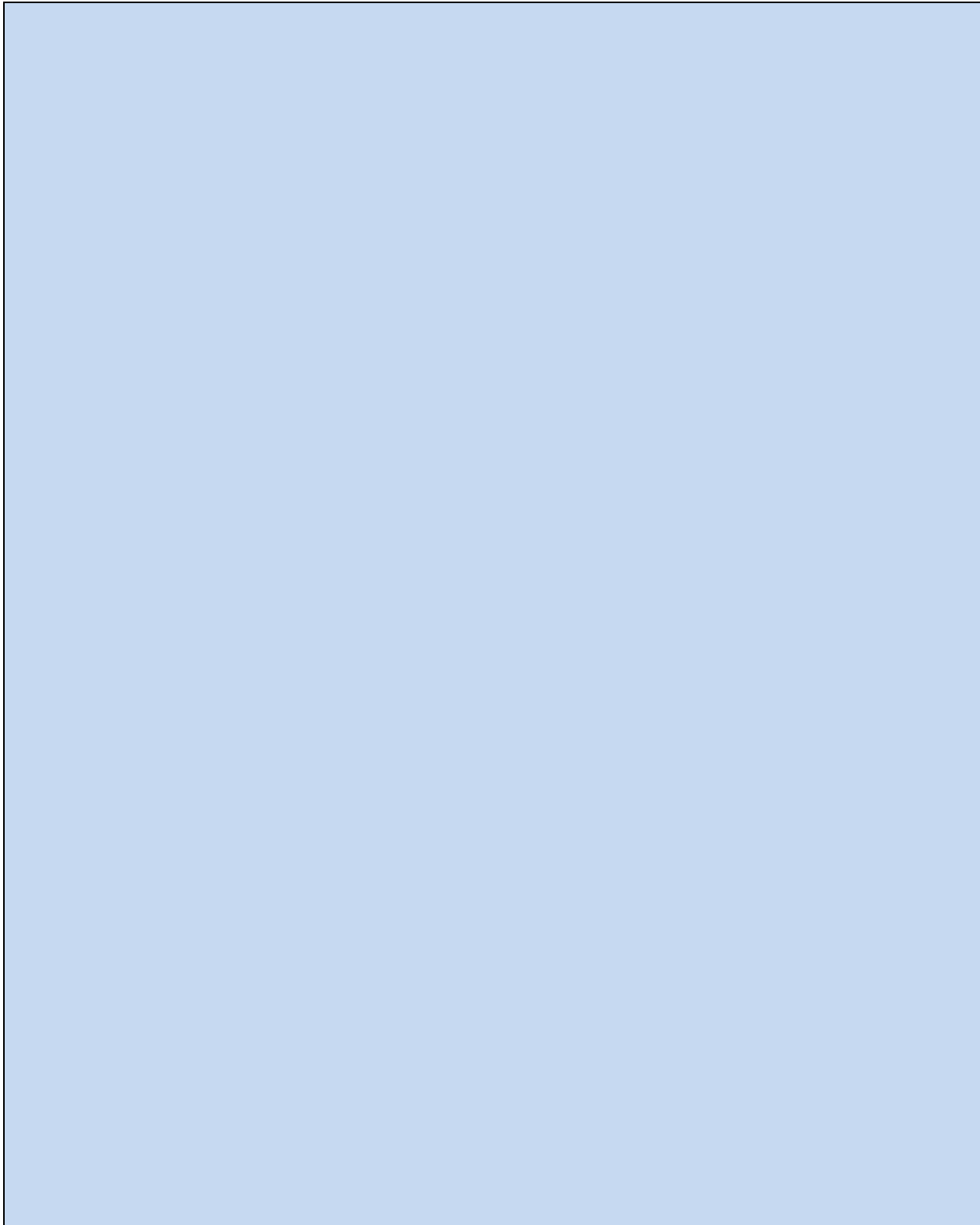


TABLE OF CONTENTS – TEST REPORT FORMAT

1 General Information	Location
1.1 Multi-dimensional measuring instruments	6
1.2 Guidance for the Testing Laboratories	7
1.3 General Information concerning type	8
1.4 Information on Accessories supplied by Applicant	9
1.5 Information on submitted calibrations	10
1.6 Documentation supplied by applicant	11
1.7 Explanatory notes to the test report	12
 2 Type Evaluation Tests	
2.1 Summary of type evaluation	13
2.2 Warm -up time test	14
2.3 Static temperature test	15
2.4 Damp Heat Steady state test	19
2.5 AC Power variation test	22
2.6 Battery voltage variation test	25
2.7 Short time power reduction test	27
2.8 Electrical bursts test	28
2.9 Electrical discharge test	30
2.10 Electrical Surges test	33
2.11 Electromagnetic Susceptibility test	39
2.12 Ambient light test	42
2.13 Acoustic test	46
2.14 Shape of the object	49
2.15 Uniform surface colour test	50
2.16 Non uniform surface colour test	51
2.17 Contrast of colour with background colour test	52
2.18 Surface reflectivity and absorption of sound test	53
2.19 Surface reflectivity and absorption of colour test	54
2.20 Uniformity of density test	55
2.21 Transparency test	56
2.22 Surface roughness test	57
2.23 Protrusions on the surface test	58
2.24 Orientation and position test	59
2.25 Speed of relative movement test	60
2.26 Examination of the construction of the instrument	62
2.27 Checklist	63

1. General Information	
1.1 Multi Dimensional Measuring Instruments	
Application	
Report Number	
Applicant Information	
Organisation Name	
Address	
Phone	
E-mail	
Instrument to be tested	
Manufacturer	
Model	
Additional Details	
Authority Responsible for this report	
Organisation	
Address	
Report Number	
Application Number	
Testing period	
Report Issue date	
Approver (Please print)	
Approver (Signature)	
Stamps (If applicable)	
Synopsis of the Test Result	
The test sample fulfills/does not fulfill ALL the requirements as detailed in OIML R129 (20xx)	
Pass/Fail	

1.2. Guidance for Testing laboratories			
Fill a new form for each new lab performing the test(s)			
Organisation Name			
Address			
Application Number			
Test(s) performed by this laboratory			
Test Period			
Lab Accreditation		Expiry	
Accrediting Authority			
Accreditation inclusive of OIML R 129		(Yes/No)	
Reference standards inclusive of measuring instruments			
Details if any of the tests have been performed at a location other than Lab premises			
Person performing the tests			
Name (Please Print)			
Signature		Date	
Authorised Signatory			
Name (Please Print)			
Signature			
Stamps (if applicable)			
Comments			

1.3. General information concerning type**Description of the instrument**

(Key technical characteristics and intended application)

Information displayed on the instrument

Manufacturer Trademark

Year of manufacture

Type designation

Model Number for type (if appl)

Electrical Power Marking

Software i.d (if appl)

Other visible marking (if any)

Comments**Information about sample units**

Serial Number	Model Number	Manufacture mode	Year
		(prototype/production)	

(Add additional rows if required)

Comments**Relevant internal/external photographs or information pertaining to examinations**

1.4. Information on accessories supplied by applicant									
Batteries (if applic)	Type			Vnom			No. required		
Data Printer (if applic)									
External data storage (if applic)									
Cables									
Other Accessories									
Information on sample instruments									
(In case the tests and evaluation are valid for more versions, give full details of the types, versions, measuring ranges, etc.)									
Justification for the selection of sample units									
Adjustments and Modifications made to the EUT during testing									
Details of previous results taken into account									

1.5. Information on the submitted calibrations

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 applic):

Default bias (if applic):

Other characteristic:

*Copy table into additional pages if more than two calibrations are submitted for examination

Comments:

Additional information (e.g. connection equipment, interfaces, etc.)

1.6. Documentation supplied by applicant								
Date received		Document title and/or reference number			Description (include version number if applicable)			
Insert rows as required								

1.7. EXPLANATORY NOTES TO THE TEST REPORT

Symbols used in this report

L = Indicated length

W = Indicated width

H = Indicated height

 L_T = Length of the test object ΔL = Error, $L - L_T$ W_T = Width of the test object ΔW = Error, $W - W_T$ H_T = Height of the test object ΔH = Error, $H - H_T$

MPE = Maximum permissible error

V = the volume indicated on the instrument

 $V_{calc} = L \times W \times H$

F = conversion factor

DW = dimensional weight indicated on the instrument

 $DW_{calc} = V \times F$

SF = significant fault

Template for completing the SUMMARY OF TEST EVALUATION and the CHECKLIST for each test:

	Pass	Fail	Remarks
When instrument has passed the test	X		
When instrument has failed the test		X	
When the test is not applicable	/	/	

The blank spaces in the headings of the report shall be filled according to the following example (where applicable):

	At start	At end
Temp (°C)		
RH (%)		
Time		
Sound (dB)		
Light (lx)		
Date		

Where:

Temp = Temperature (in °C)

Sound = Sound (in decibels)

RH = Relative Humidity (in %)

Light = Luminous flux (in lx)

“Date” in the test report refers to the date (dd/mm/yyyy) on which the test was performed.

Numbers in the brackets generally refer to the corresponding clauses and/ or subclauses of OIML R129, unless otherwise specified.

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

“ID” refers to the identity of the test object used (eg. Unique identifying number) and is entered in the appropriate columns as required.

2. Type Evaluation Tests					
2.1. SUMMARY OF TYPE EVALUATION					
Report No.:					
Application No.:					
Manufacturer:					
Make & Model:					
Section	Test	Report Page	Pass	Fail	Remarks
2.2	Warm-up time test (A.1.1)				
2.3	Static Temperature test (A.2.2)				
2.3.1	Initial reference temperature = °C				
2.3.2	(A.2.2.1) Dry Heat= °C				
2.3.3	(A.2.2.2) Cold= °C				
2.3.4	End reference temperature= °C				
2.4	Damp Heat steady state test (A.2.3)				
2.4.1	Initial reference temperature and 50% relative humidity				
2.4.2	High temperature and 85% relative humidity				
2.4.3	End reference temperature and 50% relative humidity				
2.5	AC Power variation test (A.2.4)				
2.5.1	Nominal voltage				
2.5.2	Nominal voltage + 10%				
2.5.3	Nominal voltage - 15%				
2.6	Battery voltage variation test (A.2.5)				
2.6.1	Nominal voltage				
2.6.2	Low voltage				
2.7	Short time power reduction test (A.3.1)				
2.8	Electrical bursts test (A.3.2)				
2.8.1	Power supply lines				
2.8.2	Input/output control circuits and communication lines				
2.9	Electrical discharge test (A.3.3)				
2.9.1	Direct application				
2.9.2	Indirect application				
2.9.3	Additional Sheet				
2.10	Electrical Surges (A.3.4)				
2.10.1	Electrical surges on mains power lines (A.3.4.1)				
2.10.2	Electrical surges on signal, data and control lines (A.3.4.2)				
2.11	Electromagnetic susceptibility test (A.3.5)				
2.11.1	Radiated RF electromagnetic fields (A.3.5.1)				
2.11.2	Conducted RF electromagnetic fields (A.3.5.2)				
2.11.3	Additional Sheet				
2.12	Ambient light test (A.4.1)				
2.12.1	200 lx to 500 lx (reference)				
2.12.2	100 lx				
2.12.3	1000 lx to 15000 lx				
2.12.4lx				
2.12.5	Additional Sheet				
2.13	Acoustic test (A.4.2)				
2.13.1	Reference sound level (.....dB)				
2.13.2	Sound Level 100 dB				
2.13.3	Additional Sheet				
2.14	Shape of the object (A.1.6, 6.1.4.2, B.2)				
2.15	Uniform surface colour test (A.1.6, 6.1.4.9, B.3.1)				
2.16	Non uniform surface colour test (A.1.5,6.1.4.9, B.3.2)				
2.17	Contrast of colour with background colour test (A.1.5,6.1.4.9, B.3.3)				
2.18	Surface reflectivity and absorption of sound test (A.1.5,6.1.4.9, B.3.4)				
2.19	Surface reflectivity and absorption of colour test (A.1.5,6.1.4.9, B.3.5)				
2.2	Uniformity of density test (A.1.5,6.1.4.9, B.3.6)				
2.21	Transparency test (A.1.5,6.1.4.9, B.3.7)				
2.22	Surface roughness test (A.1.5,6.1.4.9, B.3.8)				
2.23	Protrusions on the surface test (A.1.5,6.1.4.5, B.3.9)				
2.24	Orientation and position test (A.1.5,6.1.4.6, B.4)				
2.25	Speed of relative movement test (A.1.5,6.1.4.7)				
2.25.1	Minimum speed				
2.25.2	Maximum speed				
2.26	Examination of the construction of the instrument (5.1.2)				
2.27	Checklist				
OVERALL RESULT					

2.2 Warm -Up Time test (A.1.1)

Observer:

Type/ application #:

Instrument 1 ID:

Instrument 2 ID:

General comments on test:

	Not warm	Warm	
Ambient temp (t):			°C
Ambient RH:			%
Date commenced:			ddmmyyyy
Time commenced:			hh:mm

Instrument 1, close to minimum dimensions

Instrument ID

 Length =
 unit=

 Width =
 unit=

 Height =
 unit=

Instrument 2, close to maximum dimensions

Instrument ID

 Length =
 unit=

 Width =
 unit=

 Height =
 unit=

Instrument 1 (close to minimum dimensions)

Instrument ID

Time	Initial zeroing/Ready state	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail
(units)	(Yes/No)								
0 minutes									
5 minutes									
15 minutes									
30 minutes									

Instrument 2 (close to maximum dimensions)

Instrument ID

Time	Initial zeroing/Ready state	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail
(units)	(Yes/No)								
0 minutes									
5 minutes									
15 minutes									
30 minutes									

RESULT :

PASS

FAIL

2.3 Static Temperature test (A.2.2)												
2.3.1 Initial Reference temperature test (A.2.2)												
Observer:									At start		At end	
Type/ application #:									Temp (°C)			
Instrument ID:									RH (%)			
Scale Interval (d):									Time			
Conversion Factor (F)									Date			
Auxiliary Device :		Connected			Not connected but connectable				Not connected			
Correct indication of Auxiliary 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	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID			Length =		Width =		Height =		Initial zeroing		yes	
			unit=		unit=		unit=		(Ready condition)		no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID			Length =		Width =		Height =		Initial zeroing		yes	
			unit=		unit=		unit=		(Ready condition)		no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID			Length =		Width =		Height =		Initial zeroing		yes	
			unit=		unit=		unit=		(Ready condition)		no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID			Length =		Width =		Height =		Initial zeroing		yes	
			unit=		unit=		unit=		(Ready condition)		no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID			Length =		Width =		Height =		Initial zeroing		yes	
			unit=		unit=		unit=		(Ready condition)		no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
RESULT:				PASS				FAIL				

2.3 Static Temperature test (A.2.2)

2.3.2 High temperature test (A.2.2.1)

Observer:													At start	At end
Type/ application #:													Temp (°C)	
Instrument ID:													RH (%)	
Scale Interval (d):													Time	
Conversion Factor (F)													Date	
Auxiliary Device :		Connected		Not connected			Not connected							
				but connectable										
Correct indication of Auxiliary 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			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail		
1														
2														
3														
Test object ID		Length =		Width =		Height =		Initial zeroing			yes			
		unit=		unit=		unit=		(Ready condition)			no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail		
1														
2														
3														
Test object ID		Length =		Width =		Height =		Initial zeroing			yes			
		unit=		unit=		unit=		(Ready condition)			no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail		
1														
2														
3														
Test object ID		Length =		Width =		Height =		Initial zeroing			yes			
		unit=		unit=		unit=		(Ready condition)			no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail		
1														
2														
3														
Test object ID		Length =		Width =		Height =		Initial zeroing			yes			
		unit=		unit=		unit=		(Ready condition)			no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail		
1														
2														
3														
RESULT:		PASS			FAIL									

2.3 Static Temperature test (A.2.2)

2.3.3 Cold temperature test (A.2.2.2)

Observer:												At start	At end
Type/ application #:												Temp (°C)	
Instrument ID:												RH (%)	
Scale Interval (d):												Time	
Conversion Factor (F)												Date	
Auxillary Device :	Connected				Not connected but connectable				Not connected				
Correct indication of Auxillary device		(yes/no)											
Conveyor Speed (m/min):	minimum				maximum				other				
Test object ID			Length =		Width =		Height =			Initial zeroing (Ready condition)		yes no	
			unit=		unit=		unit=						
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID			Length =		Width =		Height =			Initial zeroing (Ready condition)		yes no	
			unit=		unit=		unit=						
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID			Length =		Width =		Height =			Initial zeroing (Ready condition)		yes no	
			unit=		unit=		unit=						
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID			Length =		Width =		Height =			Initial zeroing (Ready condition)		yes no	
			unit=		unit=		unit=						
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID			Length =		Width =		Height =			Initial zeroing (Ready condition)		yes no	
			unit=		unit=		unit=						
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID			Length =		Width =		Height =			Initial zeroing (Ready condition)		yes no	
			unit=		unit=		unit=						
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
RESULT:			PASS				FAIL						

2.3 Static Temperature test (A.2.2)

2.3.4 Reference temperature test (A.2.2)

Observer:													At start	At end
Type/ application #:													Temp (°C)	
Instrument ID:													RH (%)	
Scale Interval (d):													Time	
Conversion Factor (F)													Date	
Auxillary Device :		Connected		Not connected but connectable			Not connected							
Correct indication of Auxillary device			(yes/no)											
Conveyor Speed (m/min):		minimum		maximum		other								
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)			yes			
		unit=		unit=		unit=					no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail		
1														
2														
3														
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)			yes			
		unit=		unit=		unit=					no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail		
1														
2														
3														
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)			yes			
		unit=		unit=		unit=					no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail		
1														
2														
3														
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)			yes			
		unit=		unit=		unit=					no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail		
1														
2														
3														
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)			yes			
		unit=		unit=		unit=					no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail		
1														
2														
3														
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)			yes			
		unit=		unit=		unit=					no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail		
1														
2														
3														
RESULT:		PASS			FAIL									

2.4 Damp Heat Steady State test (A2.3)

2.4.1 Initial reference temperature and 50% relative humidity test (A.2.3)

Observer:												At start	At end
Type/ application #:												Temp (°C)	
Instrument ID:												RH (%)	
Scale Interval (d):												Time	
Conversion Factor (F)												Date	
Auxillary Device :	Connected		Not connected but connectable			Not connected							
Correct indication of Auxillary 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			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing		yes			
		unit=		unit=		unit=		(Ready condition)		no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing		yes			
		unit=		unit=		unit=		(Ready condition)		no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing		yes			
		unit=		unit=		unit=		(Ready condition)		no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing		yes			
		unit=		unit=		unit=		(Ready condition)		no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing		yes			
		unit=		unit=		unit=		(Ready condition)		no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
RESULT:			PASS				FAIL						

2.4 Damp Heat Steady State test (A.2.3)

2.4.2 High temperature and 85% relative humidity test (A.2.3)

Observer:												At start	At end
Type/ application #:												Temp (°C)	
Instrument ID:												RH (%)	
Scale Interval (d):												Time	
Conversion Factor (F)												Date	
Auxillary Device :	Connected			Not connected			Not connected						
Correct indication of Auxillary 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			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing		yes			
		unit=		unit=		unit=		(Ready condition)		no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing		yes			
		unit=		unit=		unit=		(Ready condition)		no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing		yes			
		unit=		unit=		unit=		(Ready condition)		no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing		yes			
		unit=		unit=		unit=		(Ready condition)		no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing		yes			
		unit=		unit=		unit=		(Ready condition)		no			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
RESULT:													
	PASS												
	FAIL												

2.4 Damp Heat Steady State test (A2.3)												
2.4.3 End reference temperature and 50% relative humidity test (A.2.3)												
Observer:									At start	At end		
Type/ application #:									Temp (°C)			
Instrument ID:									RH (%)			
Scale Interval (d):									Time			
Conversion Factor (F)									Date			
Auxillary Device :	Connected		Not connected			Not connected			Not connected			
Correct indication of Auxillary 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	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing			yes	
		unit=		unit=		unit=		(Ready condition)			no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing			yes	
		unit=		unit=		unit=		(Ready condition)			no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing			yes	
		unit=		unit=		unit=		(Ready condition)			no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing			yes	
		unit=		unit=		unit=		(Ready condition)			no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing			yes	
		unit=		unit=		unit=		(Ready condition)			no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
RESULT:			PASS				FAIL					

2.5 AC Power Variation Test (A.2.4)

2.5.1 Nominal Voltage (A.2.4)

Observer:											At start	At end
Type/ application #:											Temp (°C)	
Instrument ID:											RH (%)	
Scale Interval (d):											Time	
Conversion Factor (F)											Nominal Voltage (V)	
											Date	
Auxillary Device :	Connected		Not connected		Not connected							
Correct indication of Auxillary 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		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
RESULT:			PASS				FAIL					

2.5 AC Power Variation Test (A.2.4)

2.5.2 Nominal Voltage + 10% (A.2.4)

Observer:											At start	At end
Type/ application #:											Temp (°C)	
Instrument ID:											RH (%)	
Scale Interval (d):											Time	
Conversion Factor (F)											Nominal Voltage +10% (V)	
											Date	
Auxiliary Device :	Connected		Not connected		Not connected							
			but connectable									
Correct indication of Auxiliary 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		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
RESULT:												
	PASS											
	FAIL											

2.5 AC Power Variation Test (A.2.4)

2.5.3 Nominal Voltage - 15% (A.2.4)

Observer:											At start	At end
Type/ application #:											Temp (°C)	
Instrument ID:											RH (%)	
Scale Interval (d):											Time	
Conversion Factor (F)											Nominal Voltage - 15% (V)	
											Date	
Auxiliary Device :	Connected		Not connected		Not connected							
			but connectable									
Correct indication of Auxiliary 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		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
RESULT:	PASS											FAIL

2.6 Battery Voltage Variation Test (A.2.5)

2.6.1 Nominal Voltage (A.2.5)

Observer:											At start	At end
Type/ application #:											Temp (°C)	
Instrument ID:											RH (%)	
Scale Interval (d):											Time	
Conversion Factor (F)											Marked Nominal Voltage (V)	
											Date	
Auxiliary Device :	Connected		Not connected		Not connected							
			but connectable									
Correct indication of Auxiliary 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		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
Test object ID		Length =		Width =		Height =		Initial zeroing		yes		
		unit=		unit=		unit=		(Ready condition)		no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail
1												
2												
3												
RESULT:												
	PASS											
	FAIL											

2.6 Battery Volatge Variation Test (A.2.5)

2.6.2 Low Voltage (A.2.5)

Observer:											At start	At end	
Type/ application #:											Temp (°C)		
Instrument ID:											RH (%)		
Scale Interval (d):											Time		
Conversion Factor (F)											Low Voltage (V)		
											Date		
Auxillary Device :	Connected		Not connected but connectable			Not connected							
Correct indication of Auxillary device		(yes/no)											
Conveyor Speed (m/min):	minimum		maximum			other							
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)			yes		
		unit=		unit=		unit=					no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)			yes		
		unit=		unit=		unit=					no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)			yes		
		unit=		unit=		unit=					no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)			yes		
		unit=		unit=		unit=					no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)			yes		
		unit=		unit=		unit=					no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
RESULT:			PASS			FAIL							

2.7 Short time Power Reduction Test (A.3.1)

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

At start

At end

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

Auxiliary Device :

Correct indication of Auxiliary device

Conveyor Speed (m/min):

Connected

(yes/no)

minimum

Not connected

but connectable

maximum

other

Test object ID

Length =

unit=

Width =

unit=

Height =

unit=

Initial zeroing

(Ready condition)

yes

no

Instrument

Reduction in amplitude

(as % marked nom voltage)

Duration

(in cycles)

disturbances

units

Number of

disturbances

Time btween

disturbances

Indication

L

W

H

SF > d

SF*

Result

Comment

0

0

0

0

-

100

0.5

10

10 s

0

0

0

0

-

50

0.5

10

10 s

Auxiliary Device

Reduction in amplitude

(as % marked nom voltage)

Duration

(in cycles)

disturbances

units

Number of

disturbances

Time btween

disturbances

Indication

L

W

H

SF > d

SF*

Result

Comment

0

0

0

0

-

100

0.5

10

10 s

0

0

0

0

-

50

0.5

10

10 s

Notes:

1. SF* - Significant Fault detected and acted upon.

2. amplitude* - In case of a marked voltage range, use the average value as the marked nominal voltage.

RESULT:

PASS

FAIL

2.8 Electrical Bursts (A.3.2)

2.8.1 Power supply lines (A.3.2)

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

At start

At end

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

Auxiliary Device :

Connected

Not connected

but connectable

Not connected

Correct indication of Auxiliary device

(yes/no)

Conveyor Speed (m/min):

minimum

maximum

other

Test object ID

Length =

Width =

Height =

Initial zeroing

(Ready condition)

yes

no

Instrument

	Measurement			Polarity	Results						
	L	N	PE		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
	ground	ground	ground		L	W	H				
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

Auxiliary device

	Connection			Polarity	Results						
	L	N	PE		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
	ground	ground	ground		L	W	H				
Without disturbance											
	X			pos neg							
Without disturbance		X		pos neg							
			X	pos neg							
Without disturbance											
				pos neg							

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

RESULT:

PASS

FAIL

2.8 Electrical Bursts (A.3.2)

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

Observer:

Type/ application #:							At start	At end
Instrument ID:						Temp (°C)		
Scale Interval (d):						RH (%)		
Conversion Factor (F)						Time		
						Nominal Voltage (V)		
						Date		
Auxiliary Device :	Connected			Not connected		Not connected		
				but connectable				
Correct indication of Auxiliary device			(yes/no)					
Conveyor Speed (m/min):	minimum			maximum		other		
Test object ID			Length =		Width =		Height =	
			unit=		unit=		unit=	
			Initial zeroing		yes			
			(Ready condition)		no			

Connection	Polarity	Results						
Cable / Interface		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
		L	W	H				
Without disturbance								
	pos							
	neg							
Without disturbance								
	pos							
	neg							
Without disturbance								
	pos							
	neg							
Without disturbance								
	pos							
	neg							
Without disturbance								
	pos							
	neg							

NOTES 1. SF * - Significant fault detected and acted upon.

Remarks:

(Explain or make a sketch indicating the location of clamp on the cable.)

--

RESULT:

PASS

FAIL

2.9 Electrostatic Discharge (A.3.3)

2.9.1 Direct Application (A.3.3)

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

At start

At end

Auxiliary Device :

Connected

Not connected
but connectable

Not connected

Correct indication of Auxiliary device

(yes/no)

Conveyor Speed (m/min):

minimum

maximum

other

Contact discharges

Air discharges

Paint penetration

Polarity **

positive

negative

Test object ID

Length =

Width =

Height =

Initial zeroing

yes

unit=

unit=

unit=

(Ready condition)

no

Instrument

Disturbance			Results						
Test Voltage (kV)	No. of discharges	Rep. interval (s)	Indication			SF > d	SF *	Result	Comment
units			L	W	H	Y/N	Y/N	PASS/FAIL	
Without disturbance									
2									
4									
6									
8*									

Note SF * - Significant fault detected and acted upon.

Auxiliary device

Disturbance			Results						
Test Voltage (kV)	No. of discharges	Rep. interval (s)	Indication			SF > d	SF *	Result	Comment
units			L	W	H	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, record the test point at which the EUT fails.
 3. Polarity ** - Tests shall be conducted at the most sensitive polarity.

RESULT:

PASS

FAIL

2.9 Electrostatic Discharge (A.3.3)

2.9.2 Indirect Application (A.3.3)

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

At start

At end

Auxiliary Device :

Connected

Not connected
but connectable

Not connected

Correct indication of Auxiliary device

(yes/no)

Conveyor Speed (m/min):

minimum

maximum

other

Contact discharges

Air discharges

Paint penetration

Polarity **

positive

negative

Test object ID

Length =

Width =

Height =

Initial zeroing

yes

unit=

unit=

unit=

(Ready condition)

no

Horizontal coupling plane

Disturbance			Results						
Test Voltage (kV)	No. of discharges	Rep. interval (s)	Indication			SF > d	SF *	Result	Comment
units			L	W	H	Y/N	Y/N	PASS/FAIL	
Without disturbance									
2									
4									
6									
8*									

Note SF * - Significant fault detected and acted upon.

Vertical coupling plane

Disturbance			Results						
Test Voltage (kV)	No. of discharges	Rep. interval (s)	Indication			SF > d	SF *	Result	Comment
units			L	W	H	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, record the test point at which the EUT fails.
3. Polarity ** - Tests shall be conducted at the most sensitive polarity.

RESULT:

PASS

FAIL

2.9 Electrostatic Discharge (A.3.3)

2.9.3 Electrostatic discharge Additional sheet (A3.3)

Specifications of test points of EUT (eg) photos or sketches

a) Direct application

Contact discharges:

Air discharges:

b) Indirect application

Contact discharges:

Air discharges:

2.10 Electrical Surges (A.3.4)

2.10.1 Surges on AC and DC mains power lines (A.3.4.1)

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

At start

At end

Auxiliary Device :

Connected

Not connected

but connectable

Not connected

Correct indication of Auxiliary device

(yes/no)

Conveyor Speed (m/min):

minimum

maximum

other

Test object ID

Length =

Width =

Height =

Initial zeroing

(Ready condition)

yes

no

DC Mains Power

Instrument

Connection	Mode	Results						
Test conditions		L	Indication W	H	SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
No Surge (reference condition)								
Positive	L-L							
	L-L							
	L-L							
Negative	L-L							
	L-L							
	L-L							
Positive	L-E							
	L-E							
	L-E							
Negative	L-E							
	L-E							
	L-E							

Note 1. SF * - Significant fault detected and acted upon.

2. L-L - Line to Line Surge

3. L-E - Line to Earth Surge

Auxiliary Devices

Connection	Mode	Results						
Test conditions		L	Indication W	H	SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
No Surge (reference condition)								
Positive	L-L							
	L-L							
	L-L							
Negative	L-L							
	L-L							
	L-L							
Positive	L-E							
	L-E							
	L-E							
Negative	L-E							
	L-E							
	L-E							

Note 1. SF * - Significant fault detected and acted upon.

2. L-L - Line to Line Surge

3. L-E - Line to Earth Surge

RESULT:

PASS

FAIL

2.10 Electrical Surges (A.3.4)

2.10.1 Surges on AC and DC mains power lines (A.3.4.1)

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

At start

At end

Auxiliary Device :

Connected

Not connected

but connectable

Not connected

Correct indication of Auxiliary device

(yes/no)

Conveyor Speed (m/min):

minimum

maximum

other

Test object ID

Length =

Width =

Height =

Initial zeroing

(Ready condition)

yes

no

AC surge voltage at 0°

Instrument

Connection	Mode	Results						
Test conditions		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
		L	W	H				
No Surge (reference condition)								
Positive	L-L							
	L-L							
	L-L							
Negative	L-L							
	L-L							
	L-L							
Positive	L-E							
	L-E							
	L-E							
Negative	L-E							
	L-E							
	L-E							

Note 1. SF * - Significant fault detected and acted upon.

2. L-L - Line to Line Surge

3. L-E - Line to Earth Surge

Auxiliary Devices

Connection	Mode	Results						
Test conditions		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
		L	W	H				
No Surge (reference condition)								
Positive	L-L							
	L-L							
	L-L							
Negative	L-L							
	L-L							
	L-L							
Positive	L-E							
	L-E							
	L-E							
Negative	L-E							
	L-E							
	L-E							

Note 1. SF * - Significant fault detected and acted upon.

2. L-L - Line to Line Surge

3. L-E - Line to Earth Surge

RESULT:

PASS

FAIL

2.10 Electrical Surges (A.3.4)

2.10.1 Surges on AC and DC mains power lines (A.3.4.1)

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

At start

At end

Auxiliary Device :

Connected

Not connected

but connectable

Not connected

Correct indication of Auxiliary device

(yes/no)

Conveyor Speed (m/min):

minimum

maximum

other

Test object ID

Length =

Width =

Height =

Initial zeroing

(Ready condition)

yes

no

AC surge voltage at 90°

Instrument

Connection	Mode	Results						
Test conditions		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
		L	W	H				
No Surge (reference condition)								
Positive	L-L							
	L-L							
	L-L							
Negative	L-L							
	L-L							
	L-L							
Positive	L-E							
	L-E							
	L-E							
Negative	L-E							
	L-E							
	L-E							

Note 1. SF * - Significant fault detected and acted upon.

2. L-L - Line to Line Surge

3. L-E - Line to Earth Surge

Auxiliary Devices

Connection	Mode	Results						
Test conditions		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
		L	W	H				
No Surge (reference condition)								
Positive	L-L							
	L-L							
	L-L							
Negative	L-L							
	L-L							
	L-L							
Positive	L-E							
	L-E							
	L-E							
Negative	L-E							
	L-E							
	L-E							

Note 1. SF * - Significant fault detected and acted upon.

2. L-L - Line to Line Surge

3. L-E - Line to Earth Surge

RESULT:

PASS

FAIL

2.10 Electrical Surges (A.3.4)

2.10.1 Surges on AC and DC mains power lines (A.3.4.1)

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

At start

At end

Auxiliary Device :

Connected

Not connected

but connectable

Not connected

Correct indication of Auxiliary device

(yes/no)

Conveyor Speed (m/min):

minimum

maximum

other

Test object ID

Length =

Width =

Height =

Initial zeroing

(Ready condition)

yes

no

AC surge voltage at 180°

Instrument

Connection	Mode	Results						
Test conditions		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
		L	W	H				
No Surge (reference condition)								
Positive	L-L							
	L-L							
	L-L							
Negative	L-L							
	L-L							
	L-L							
Positive	L-E							
	L-E							
	L-E							
Negative	L-E							
	L-E							
	L-E							

Note 1. SF * - Significant fault detected and acted upon.

2. L-L - Line to Line Surge

3. L-E - Line to Earth Surge

Auxiliary Devices

Connection	Mode	Results						
Test conditions		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
		L	W	H				
No Surge (reference condition)								
Positive	L-L							
	L-L							
	L-L							
Negative	L-L							
	L-L							
	L-L							
Positive	L-E							
	L-E							
	L-E							
Negative	L-E							
	L-E							
	L-E							

Note 1. SF * - Significant fault detected and acted upon.

2. L-L - Line to Line Surge

3. L-E - Line to Earth Surge

RESULT:

PASS

FAIL

2.10 Electrical Surges (A.3.4)

2.10.1 Surges on AC and DC mains power lines (A.3.4.1)

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

At start

At end

Auxiliary Device :

Connected

Not connected

but connectable

Not connected

Correct indication of Auxiliary device

(yes/no)

Conveyor Speed (m/min):

minimum

maximum

other

Test object ID

Length =

Width =

Height =

Initial zeroing

(Ready condition)

yes

no

AC surge voltage at 270°

Instrument

Connection	Mode	Results						
Test conditions		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
		L	W	H				
No Surge (reference condition)								
Positive	L-L							
	L-L							
	L-L							
Negative	L-L							
	L-L							
	L-L							
Positive	L-E							
	L-E							
	L-E							
Negative	L-E							
	L-E							
	L-E							

Note 1. SF * - Significant fault detected and acted upon.

2. L-L - Line to Line Surge

3. L-E - Line to Earth Surge

Auxiliary Devices

Connection	Mode	Results						
Test conditions		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
		L	W	H				
No Surge (reference condition)								
Positive	L-L							
	L-L							
	L-L							
Negative	L-L							
	L-L							
	L-L							
Positive	L-E							
	L-E							
	L-E							
Negative	L-E							
	L-E							
	L-E							

Note 1. SF * - Significant fault detected and acted upon.

2. L-L - Line to Line Surge

3. L-E - Line to Earth Surge

RESULT:

PASS

FAIL

2.10 Electrical Surges (A.3.4)

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

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

At start

At end

Auxiliary Device :

Connected

Not connected

but connectable

Not connected

Correct indication of Auxiliary device

(yes/no)

Conveyor Speed (m/min):

minimum

maximum

other

Test object ID

Length =

Width =

Height =

Initial zeroing

(Ready condition)

yes

no

Connection	Mode	Results						
Test conditions		Indication			SF > d Y/N	SF * Y/N	Result PASS/FAIL	Comment
		L	W	H				
No Surge (reference condition)								
Positive	L-L							
	L-L							
	L-L							
Negative	L-L							
	L-L							
	L-L							
Positive	L-E							
	L-E							
	L-E							
Negative	L-E							
	L-E							
	L-E							

Note 1. SF * - Significant fault detected and acted upon.

2. L-L - Line to Line Surge

3. L-E - Line to Earth Surge

RESULT:

PASS

FAIL

2.11 Electromagnetic susceptibility tests (A.3.5)

2.11.1 Radiated RF electromagnetic fields (A.3.5.1)

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

At start

At end

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

Auxiliary Device :

Connected

Not connected

but connectable

Not connected

Correct indication of Auxiliary device

(yes/no)

Conveyor Speed (m/min):

minimum

maximum

other

Rate of sweep:

Test object ID

Length =

Width =

Height =

Initial zeroing

(Ready condition)

yes

no

Disturbance

Results

				Indication						
Antenna	Frequency	Antenna polarisation	Facing EUT	L	W	H	SF > d	SF *	Result	Comment
	range						Y/N	Y/N	PASS/FAIL	
Without disturbance										
		Vertical	Front							
			Right							
			Left							
			Rear							
Without disturbance										
		Horizontal	Front							
			Right							
			Left							
			Rear							

NOTES 1. SF * - Significant fault detected and acted upon.

Frequency range : 26 MHz to 2000 MHz

Field strength: 10 V/m

Modulation 80 % Am, 1 KHz sine wave

Remarks:

RESULT:

PASS

FAIL

2.11 Electromagnetic susceptibility tests (A.3.5)

2.11.2 Conducted RF electromagnetic fields (A.3.5.2)

Observer:

Type/ application #:

Instrument ID:

Scale Interval (d):

Conversion Factor (F)

At start

At end

Temp (°C)

RH (%)

Time

Nominal Voltage (V)

Date

Auxiliary Device :

Connected

Not connected

but connectable

Not connected

Correct indication of Auxiliary device

(yes/no)

Conveyor Speed (m/min):

minimum

maximum

other

Rate of sweep:

Test object ID

Length =

Width =

Height =

Initial zeroing

(Ready condition)

yes

no

Disturbance

Results

				Indication						
Antenna	Frequency	Antenna polarisation	Facing EUT	L	W	H	SF > d	SF *	Result	Comment
	range						Y/N	Y/N	PASS/FAIL	
Without disturbance										
		Vertical	Front							
			Right							
			Left							
			Rear							
Without disturbance										
		Horizontal	Front							
			Right							
			Left							
			Rear							

NOTES 1. SF * - Significant fault detected and acted upon.

Frequency range : 0.15 MHz to 80 MHz

Field strength: 10 V/m

Modulation 80 % Am, 1 KHz sine wave

Remarks:

RESULT:

PASS

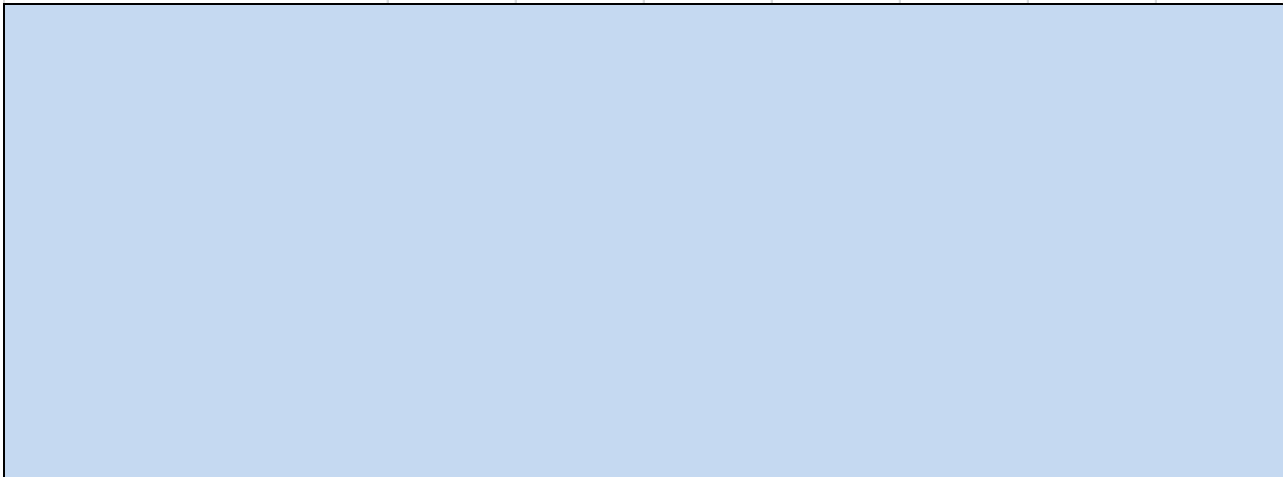
FAIL

2.11 Electromagnetic susceptibility tests (A.3.5)**2.11.3 Additional Sheet**

1. Description of the set up of the EUT, eg. by photos ,sketches etc.



2. Additional Remarks



2.12 Ambient Light Test (A.4.1)

2.12.1 Reference conditions 200 lx to 500 lx (A.4.1)

Observer:					At start	At end				
Type/ application #:					Temp (°C)					
Instrument ID:					RH (%)					
Scale Interval (d):					Time					
Conversion Factor (F)					Light (lx)					
					Date					
Auxiliary Device :	Connected		Not connected		Not connected					
			but connectable							
Correct indication of Auxiliary 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
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Remarks										
RESULT:	PASS		FAIL							

2.12 Ambient Light Test (A.4.1)**2.12.2 Light testing at 100 lx (A.4.1)**


Observer:				At start		At end					
Type/ application #:				Temp (°C)							
Instrument ID:				RH (%)							
Scale Interval (d):				Time							
Conversion Factor (F)				Light (lx)							
				Date							
Auxillary Device :		Connected		Not connected		Not connected					
				but connectable							
Correct indication of Auxillary 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	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail			
1											
2											
3											
Test object ID		Length =		Width =		Height =		Initial zeroing		yes	
		unit=		unit=		unit=		(Ready condition)		no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail			
1											
2											
3											
Test object ID		Length =		Width =		Height =		Initial zeroing		yes	
		unit=		unit=		unit=		(Ready condition)		no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail			
1											
2											
3											
Test object ID		Length =		Width =		Height =		Initial zeroing		yes	
		unit=		unit=		unit=		(Ready condition)		no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail			
1											
2											
3											
Test object ID		Length =		Width =		Height =		Initial zeroing		yes	
		unit=		unit=		unit=		(Ready condition)		no	
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail			
1											
2											
3											
Remarks											
RESULT:		PASS				FAIL					

2.12 Ambient Light Test (A.4.1)
2.12.3 Light testing at 1000 lx to 1500 lx (A.4.1)

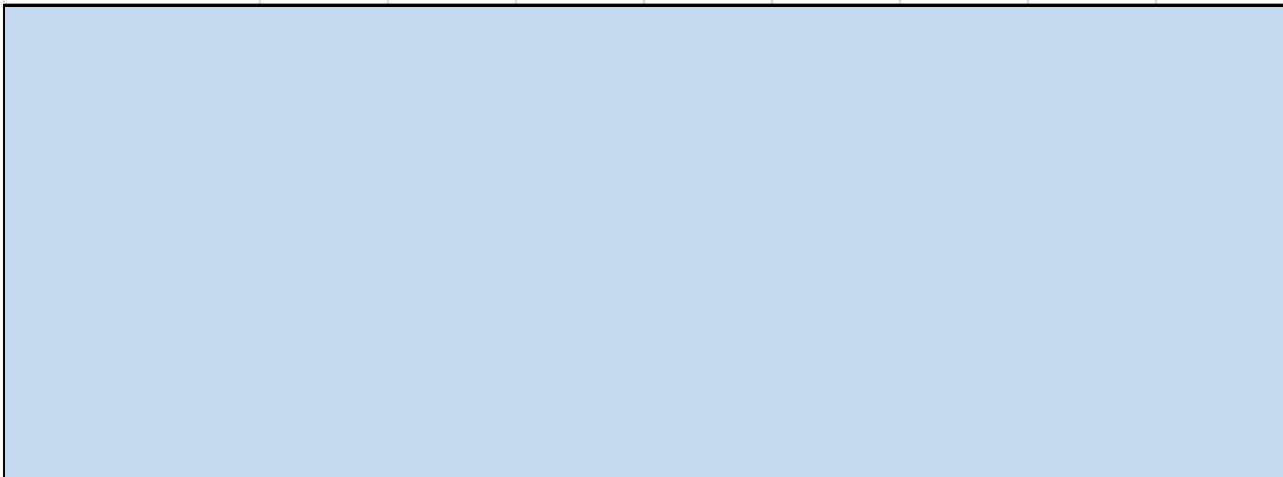
Observer:					At start	At end				
Type/ application #:					Temp (°C)					
Instrument ID:					RH (%)					
Scale Interval (d):					Time					
Conversion Factor (F)					Light (lx)					
					Date					
Auxillary Device :	Connected		Not connected		Not connected					
			but connectable							
Correct indication of Auxillary 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
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Remarks										
RESULT:	PASS									

2.12 Ambient Light Test (A.4.1)**2.12.5 Additional Sheet**

1. Description of the set up of the EUT, eg. photos or sketches



2. Additional remarks



2.13 Acoustic Test (A.4.2)

2.13.1 Reference sound level (dB) (A.4.2)

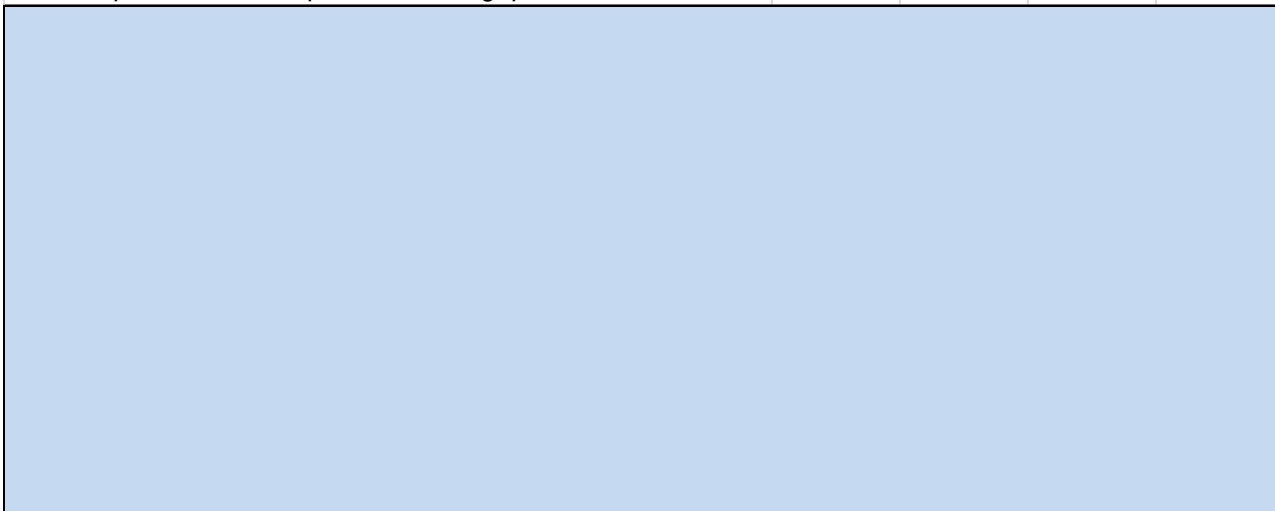
Observer:					At start	At end				
Type/ application #:					Temp (°C)					
Instrument ID:					RH (%)					
Scale Interval (d):					Time					
Conversion Factor (F)					Sound (dB)					
					Date					
Auxiliary Device :	Connected		Not connected		Not connected					
			but connectable							
Correct indication of Auxiliary 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
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Remarks										
RESULT:	PASS		FAIL							

2.13 Acoustic Test (A.4.2)
2.13.2 100 dB sound level (dB) (A.4.2)

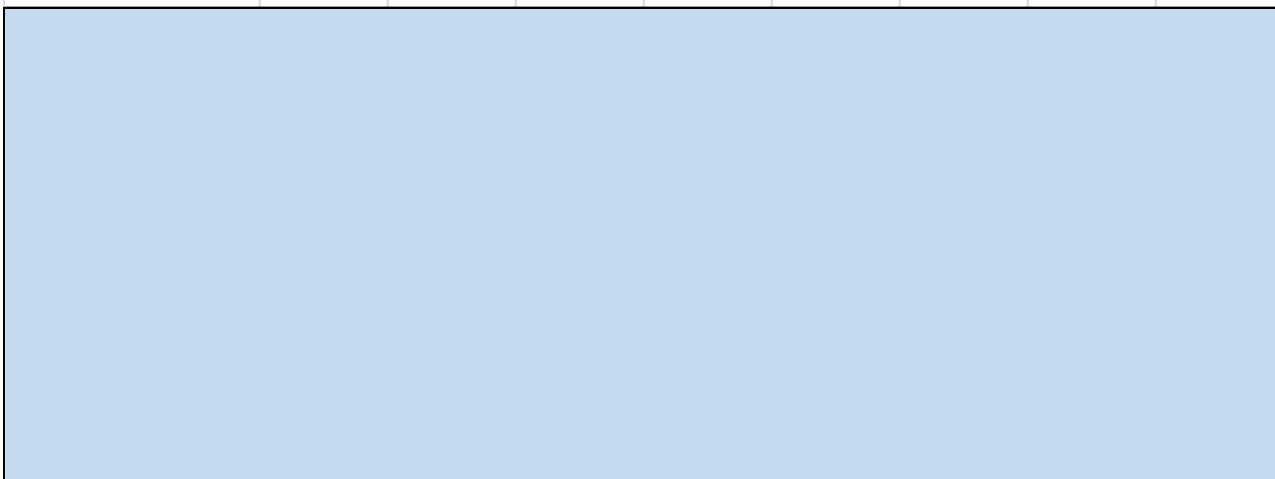
Observer:					At start	At end				
Type/ application #:					Temp (°C)					
Instrument ID:					RH (%)					
Scale Interval (d):					Time					
Conversion Factor (F)					Sound (dB)					
					Date					
Auxiliary Device :	Connected		Not connected		Not connected					
			but connectable							
Correct indication of Auxiliary 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
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Remarks										
RESULT:	PASS		FAIL							

2.13 Acoustic Test (A.4.2)**2.13.3 Additional Sheet**

1. Description of the set up of the EUT, eg. photos or sketches



2. Additional remarks



2.14 Shape of the object (A.1.6, 6.1.4.2, B.2)

Observer:					At start	At end				
Type/ application #:					Temp (°C)					
Instrument ID:					RH (%)					
Scale Interval (d):					Time					
Conversion Factor (F)					Date					
Auxillary Device :	Connected				Not connected but connectable			Not connected		
Correct indication of Auxillary device		(yes/no)								
Conveyor Speed (m/min):	minimum				maximum			other		
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes/no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 1st test object										
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes/no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 2 nd test object										
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes/no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 3 rd test object										
Remarks (further information required to describe test objects eg. photos or sketches)										
RESULT:	PASS		FAIL							

2.15 Uniform Surface Colour Test (A.1.6, 6.1.4.9, B.3.1)

Observer:					At start	At end				
Type/ application #:					Temp (°C)					
Instrument ID:					RH (%)					
Scale Interval (d):					Time					
Conversion Factor (F)					Date					
Auxillary Device :	Connected			Not connected		Not connected				
				but connectable						
Correct indication of Auxillary 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
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 1st test object										
Test Object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 2 nd test object										
Test Object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 3 rd test object										
Remarks (further information required to describe test objects eg. photos or sketches)										
RESULT:	PASS		FAIL							

2.16 Non Uniform Surface Colour Test (A.1.5, 6.1.4.9, B.3.2)

Observer:					At start	At end				
Type/ application #:					Temp (°C)					
Instrument ID:					RH (%)					
Scale Interval (d):					Time					
Conversion Factor (F)					Date					
Auxillary Device :	Connected				Not connected but connectable			Not connected		
Correct indication of Auxillary device		(yes/no)								
Conveyor Speed (m/min):	minimum				maximum			other		
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 1st test object										
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 2 nd test object										
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 3 rd test object										
Remarks (further information required to describe test objects eg. photos or sketches)										
RESULT:		PASS		FAIL						

2.17 Contrast of Colour with background colour test (A.1.5, 6.1.4.9, B.3.3)

Observer:					At start	At end		
Type/ application #:					Temp (°C)			
Instrument ID:					RH (%)			
Scale Interval (d):					Time			
Conversion Factor (F)					Date			
Auxillary Device :	Connected			Not connected but connectable		Not connected		
Correct indication of Auxillary device		(yes/no)						
Conveyor Speed (m/min):	minimum			maximum		other		
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)
		unit=		unit=		unit=		yes no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail
1								
2								
3								
Description of the 1st test object								
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)
		unit=		unit=		unit=		yes no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail
1								
2								
3								
Description of the 2 nd test object								
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)
		unit=		unit=		unit=		yes no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail
1								
2								
3								
Description of the 3 rd test object								
Remarks (further information required to describe test objects eg. photos or sketches)								
RESULT:	PASS		FAIL					

2.18 Surface Reflectivity and absorption of sound test (A.1.5, 6.1.4.9, B.3.4)

Observer:					At start	At end				
Type/ application #:					Temp (°C)					
Instrument ID:					RH (%)					
Scale Interval (d):					Time					
Conversion Factor (F)					Date					
Auxiliary Device :	Connected				Not connected but connectable			Not connected		
Correct indication of Auxiliary device		(yes/no)								
Conveyor Speed (m/min):	minimum				maximum			other		
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 1st test object										
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 2 nd test object										
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 3 rd test object										
Remarks (further information required to describe test objects eg. photos or sketches)										
RESULT:		PASS			FAIL					

2.19 Surface Reflectivity and absorption of light test (A.1.5, 6.1.4.9, B.3.5)

Observer:					At start	At end		
Type/ application #:					Temp (°C)			
Instrument ID:					RH (%)			
Scale Interval (d):					Time			
Conversion Factor (F)					Date			
Auxiliary Device :	Connected		Not connected		Not connected			
			but connectable					
Correct indication of Auxiliary device		(yes/no)						
Conveyor Speed (m/min):	minimum		maximum		other			
Test object ID		Length =		Width =		Height =		Initial zeroing
		unit=		unit=		unit=		(Ready condition)
								yes
								no
Run	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail
(units)								
1								
2								
3								
Description of the 1st test object								
Test object ID		Length =		Width =		Height =		Initial zeroing
		unit=		unit=		unit=		(Ready condition)
								yes
								no
Run	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail
(units)								
1								
2								
3								
Description of the 2nd test object								
Test object ID		Length =		Width =		Height =		Initial zeroing
		unit=		unit=		unit=		(Ready condition)
								yes
								no
Run	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail
(units)								
1								
2								
3								
Description of the 3rd test object								
Remarks (further information required to describe test objects eg. photos or sketches)								
RESULT: PASS FAIL								

2.20 Uniformity of Density test (A.1.5, 6.1.4.9, B.3.6)

Observer:					At start	At end				
Type/ application #:					Temp (°C)					
Instrument ID:					RH (%)					
Scale Interval (d):					Time					
Conversion Factor (F)					Date					
Auxillary Device :	Connected			Not connected but connectable			Not connected			
Correct indication of Auxillary device		(yes/no)								
Conveyor Speed (m/min):	minimum			maximum			other			
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 1st test object										
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 2 nd test object										
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes no
		unit=		unit=		unit=				
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 3 rd test object										
Remarks (further information required to describe test objects eg. photos or sketches)										
RESULT: PASS FAIL										

2.21 Transparency test (A.1.5, 6.1.4.9, B.3.7)

Observer:					At start	At end			
Type/ application #:					Temp (°C)				
Instrument ID:					RH (%)				
Scale Interval (d):					Time				
Conversion Factor (F)					Date				
Auxiliary Device :	Connected		Not connected but connectable		Not connected				
Correct indication of Auxiliary device		(yes/no)							
Conveyor Speed (m/min):	minimum		maximum		other				
Test object ID		Length = unit=		Width = unit=		Height = unit=		Initial zeroing (Ready condition)	yes no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail	
1									
2									
3									
Description of the 1st test object									
Test object ID		Length = unit=		Width = unit=		Height = unit=		Initial zeroing (Ready condition)	yes no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail	
1									
2									
3									
Description of the 2 nd test object									
Test object ID		Length = unit=		Width = unit=		Height = unit=		Initial zeroing (Ready condition)	yes no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail	
1									
2									
3									
Description of the 3 rd test object									
Remarks (further information required to describe test objects eg. photos or sketches)									
RESULT:	PASS		FAIL						

2.22 Surface Roughness test (A.1.5, 6.1.4.9, B.3.8)

Observer:					At start	At end				
Type/ application #:					Temp (°C)					
Instrument ID:					RH (%)					
Scale Interval (d):					Time					
Conversion Factor (F)					Date					
Auxillary Device :	Connected		Not connected		Not connected					
			but connectable							
Correct indication of Auxillary 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
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 1st test object										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 2 nd test object										
Test object ID		Length =		Width =		Height =		Initial zeroing		yes
		unit=		unit=		unit=		(Ready condition)		no
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail		
1										
2										
3										
Description of the 3 rd test object										
Remarks (further information required to describe test objects eg. photos or sketches)										
RESULT:		PASS			FAIL					

2.23 Protrusions on Surface Test (A.1.5, 6.1.4.9, B.3.9)

Observer:					At start	At end						
Type/ application #:					Temp (°C)							
Instrument ID:					RH (%)							
Scale Interval (d):					Time							
Conversion Factor (F)					Date							
Auxiliary Device :	Connected			Not connected but connectable			Not connected					
Correct indication of Auxiliary device		(yes/no)										
Conveyor Speed (m/min):	minimum			maximum			other					
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes		
		unit=		unit=		unit=				no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail				
1												
2												
3												
Description of the 1st test object												
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes		
		unit=		unit=		unit=				no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail				
1												
2												
3												
Description of the 2nd test object												
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)		yes		
		unit=		unit=		unit=				no		
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail				
1												
2												
3												
Description of the 3rd test object												
Remarks (further information required to describe test objects eg. photos or sketches)												
RESULT:	PASS		FAIL									

2.24 Orientation and Position Test (A.1.5, 6.1.4.9, B.4)									
Observer:					At start	At end			
Type/ application #:					Temp (°C)				
Instrument ID:					RH (%)				
Scale Interval (d):					Time				
Conversion Factor (F)					Date				
Auxillary Device :	Connected			Not connected but connectable			Not connected		
Correct indication of Auxillary device		(yes/no)							
Conveyor Speed (m/min):	minimum			maximum			other		
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)	yes no
		unit=		unit=		unit=			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail	
1									
2									
3									
Description of the 1st test object									
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)	yes no
		unit=		unit=		unit=			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail	
1									
2									
3									
Description of the 2 nd test object									
Test object ID		Length =		Width =		Height =		Initial zeroing (Ready condition)	yes no
		unit=		unit=		unit=			
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	Pass/Fail	
1									
2									
3									
Description of the 3 rd test object									
Remarks (further information required to describe orientation and position of the test objects. (eg. photos or sketches)									
RESULT:	PASS			FAIL					

2.25 Test for Speed of Relative Movement (A.1.5, 6.1.4.7)**2.25.1 Minimum Speed (A.1.5, 6.1.4.7)**

Observer:											At start	At end	
Type/ application #:											Temp (°C)		
Instrument ID:											RH (%)		
Scale Interval (d):											Time		
Conversion Factor (F)											Date		
Auxillary Device :	Connected				Not connected but connectable				Not connected				
Correct indication of Auxillary device		(yes/no)											
Conveyor Speed (m/min):	minimum				maximum			other					
Test object ID		Length =			Width =			Height =			Initial zeroing (Ready condition)		yes no
		unit=			unit=			unit=					
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =			Width =			Height =			Initial zeroing (Ready condition)		yes no
		unit=			unit=			unit=					
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =			Width =			Height =			Initial zeroing (Ready condition)		yes no
		unit=			unit=			unit=					
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =			Width =			Height =			Initial zeroing (Ready condition)		yes no
		unit=			unit=			unit=					
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =			Width =			Height =			Initial zeroing (Ready condition)		yes no
		unit=			unit=			unit=					
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Remarks													
RESULT:		PASS			FAIL								

2.25 Test for Speed of Relative Movement (A.1.5, 6.1.4.7)**2.25.2 Maximum Speed (A.1.5, 6.1.4.7)**

Observer:											At start	At end	
Type/ application #:											Temp (°C)		
Instrument ID:											RH (%)		
Scale Interval (d):											Time		
Conversion Factor (F)											Date		
Auxillary Device :	Connected				Not connected but connectable				Not connected				
Correct indication of Auxillary device		(yes/no)											
Conveyor Speed (m/min):	minimum				maximum			other					
Test object ID		Length =			Width =			Height =			Initial zeroing (Ready condition)		yes no
		unit=			unit=			unit=					
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =			Width =			Height =			Initial zeroing (Ready condition)		yes no
		unit=			unit=			unit=					
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =			Width =			Height =			Initial zeroing (Ready condition)		yes no
		unit=			unit=			unit=					
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =			Width =			Height =			Initial zeroing (Ready condition)		yes no
		unit=			unit=			unit=					
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Test object ID		Length =			Width =			Height =			Initial zeroing (Ready condition)		yes no
		unit=			unit=			unit=					
Run (units)	L	ΔL	W	ΔW	H	ΔH	MPE	V	Vcalc	DW	Dwcalc	Pass/Fail	
1													
2													
3													
Remarks													
RESULT:	PASS				FAIL								

2.26 Examination of the Construction of Instrument (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 of conformity.

This may include a picture of the complete instrument, a description of its main components and any remark which could be useful for initial or subsequent verifications of individual instruments built according to the pattern. It may also include references to the manufacturer's description.

RESULT:**PASS****FAIL**

2.27 Checklist									
Report No:									
Application No:									
Manufacturer:									
Make and Model:									
Serial No:									
Date:									
Observer:									
Requirement						Passed	Failed	Remarks	
	Units of measurement								
3	Correct units and symbols used								
	Scale intervals, minimum dimension								
4.1	Correct minimum dimensions								
	Range of special temperature limits								
4.2.1	Atleast 30 °C								
	Fraudulent Use								
5.1.1	Instrument shall not facilitate fraudulent use								
	Suitability of construction								
5.1.2	All controls, indicators, etc. are suitable.								
	Suitability for verification								
5.1.3	Constructed so that test of performance requirements can be carried out								
	Test mode provided (only volume indicated in normal position)								
	Zero or Ready Adjustment								
5.1.4	Facilitates for zero or ready condition								
	Can only be set with no object in the measurement area.								
	Zero or Ready condition indicated.								
	Condition set automatically or inhibited if not set correctly								
	Tare Device								
5.1.5 (a)	Only operates negatively with respect to the zero or ready condition.								
5.1.5 (b)	Value of the tare scale interval is the same as that for the respective axis and range.								
5.1.5 (c)	Operation of tare indicated.								
	Indicators and printing devices								
5.2.1 (a)	Instrument has atleast one indicator which displays dimensions or volume.								
5.2.1 (b)	For direct sales to the public, indication available to the customer.								
5.2.1 (c)	Indications automatically displayed or are readily available.								
5.2.1 (d)	Other indications (eg. DW, F0) are automatically displayed or are readily available								
5.2.1 (e)	Previously displayed indication does not persist for more than 1 (one) second.								
5.2.1 (f)	Display of extended indication device:								
	- while pressing a key; or								
	- limited to 5 seconds								
	No printing of extended indication								
	Extended indication device not fitted to instrument for direct sales to public.								
5.2.1 (g)	All indications are identified								
	Clarity of indications								
5.2.2	Indications, printing reliable, clear and unambiguous and printing indelible								
	Figures easy to read								
	Digital indicator stable at changeover point								
	Digits oriented normally and permit reading by simple juxtaposition.								
	Units of measurement								
5.2.3	All indications include the name/symbol of the unit of measurement								
	On tickets, name or symbol printed by printer or preprinted,								
	For any one indication, only one unit of measurement used.								

2.27 Checklist, continued

Requirement	Passed	Failed	Remarks
Value of Scale interval			
5.2.4 Value of Scale interval in the form 1,2 or 5 x 10 ⁿ			
The scale interval shall be:			
5.2.4 (a) – the same for each axis; or			
5.2.4 (b) – different for one axis from the other provided instructions are marked, or indication of incorrect use given; or			
5.2.4 (c) – variable, on one or more axes provided:			
– All three axes are multi-interval - all the same			
– two axes are multi-interval and the third is fixed.			
– instrument limitations are clearly marked.			
– one axis is multi-interval and the others are fixed.			
– instrument limitations are clearly marked.			
Decimal numbers			
5.2.5 At least one zero before decimal mark for values <1.			
Decimal mark printed.			
One or more fixed zeros to the right of variable numbers for values >1.			
Printed numbers and symbols at least 2 mm high.			
Limits of Indication			
5.2.6 Dimensions above maximum + 9d either:			
5.2.6 (a) – blank; or			
5.2.6 (b) – be identified by an obvious difference in the display.			
Multi-interval instruments			
5.2.7 For each partial measuring range:			
5.2.7 (a) – $d_1 < d_2 < \dots < d_n$;			
5.2.7 (b) – $\min = \min_1$, $\max = \max_r$, $\max_1 = \min_2$ etc.			
Multi-instrument systems			
5.2.8 Test indicator provided if indicator not near each device			
Test indicator readily connected to each device without affecting the performance.			
Indications on common indicator and test indicator agree.			
Indication from each device clearly identified on the common indicator.			
Printed and displayed information			
5.2.9 Ticket or display includes sufficient information			
Examples:			
5.2.9.1 (a) – dimensions: length (L), width (W) and height (H)			
5.2.9.1 (b) – volume (V)			
5.2.9.1 (c) – weight (W)			
5.2.9.1 (d) – dimensional weight (DW.....kg)			
5.2.9.1 (e) – dimensional tare (DT.....kg) or linear tare (LT.....cm)			
5.2.9.1 (f) – conversion factor (F)			
5.2.9.1 (g) – quantity for charging			
5.2.9.1 (h) – price rate and price			
5.2.9.1 (i) – date, transaction number etc.			
Note 1 Icons used			
Note 2 Information displayed or available on demand			
Note 3 Price interval and price rate comply with national regulations			
5.2.9.2 A printed ticket contains printed or preprinted notices stating:			
5.2.9.2 (a) – dimensions and/or volume are those of the smallest rectangular box			
5.2.9.2 (b) – dimensional weight is a calculated value			
Stability			
5.2.10 Printing or storage inhibited when equilibrium not stable.			

2.27 Checklist, continued

Requirement		Passed	Failed	Remarks
	Markings			
5.3.1	Instrument clearly and permanently marked on the nameplate in the vicinity of indicating device.			
	Nameplate contains the following information			
5.3.1 (a)	– manufacturer's name or mark			
5.3.1 (b)	– model designation			
5.3.1 (c)	– serial number and year of manufacture			
5.3.1 (d)	– pattern approval mark			
5.3.1 (e)	– minimum and maximum dimensions for each axis			
5.3.1 (f)	– maximum and minimum measuring speeds			
5.3.1 (g)	– scale interval(s) in the form of $d =$			
5.3.1 (h)	– temperature limits (if other than -10°C to 40°C)			
	Notices			
5.3.2	Notice(s) or limitation(s) of use clearly marked and visible to the operator, or in operator's manual.			
5.3.2 (a)	Special application.			
5.3.2 (b)	Minimum spacing			
5.3.2 (c)	Measure only rectangular boxes			
5.3.2 (d)	Box location			
5.3.2 (e)	Limitations of surface characteristics			
5.3.2 (f)	Dimensions / volume are those of smallest rectangular box.			
5.3.2 (g)	Dimensional weight a calculated value.			
	Other special notices relating to the instrument.			
	Verification Mark			
5.4.1	Provision made for the application of a verification mark			
	The following requirements apply:			
5.4.1 (a)	mark easily affixed without affecting the metrological properties			
5.4.1 (b)	mark visible without moving or dismantling instrument when in use.			
5.4.1 (c)	the part on which the mark is located is not removable from the instrument without damaging the mark			
5.4.1 (d)	the size of the space sufficient for a mark (e.g. at least 200 mm^2)			
	Sealing			
5.4.2	Provision made for sealing by mechanical or electronic means			
	Mechanical seal applied as in 9.1			
	For electronic seals:			
5.4.2 (a)	– access by authorised persons protected by physical key or password.			
5.4.2 (b)	– access to alter parameters automatically recorded.			
5.4.2 (c)	– record readily accessible by simple action			
5.4.2 (d)	– record readily identifiable.			
5.4.2 (e)	– reference record permanently marked on the instrument			
5.4.2 (f)	– record does not repeat in a sequence of less than 999 alterations			
	– record persists reliably for a period of at least two years.			
5.4.2 (g)	– record persists through tests for influence factors and disturbances.			
	Acting upon significant faults			
5.6.1	Instrument made automatically inoperative; or			
	visible or audible indication until user takes action or fault disappears			
	Automatic instrument made inoperative automatically			
	Indication Check			
5.6.2	Display check needed			
	Display check not needed			
	All elements of the indication are active and non-active long enough to be checked by the operator.			

2.27 Checklist, continued

[illegible]