

Ecully, le 26/09/2011

Nos références / Our references :
EL/SC

ZEFAL

Pierre Yves Mercier
ZI Les Cailloux

45150 JARGEAU

RAPPORT D'ESSAI - TEST REPORT N°LYC- 11- 4053

*Seuls les essais effectués sous le couvert de l'accréditations COFRAC portent cette mention explicite

*This report covers the tested items only and for those tests identified by this explicit mention

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OBJET DE LA DEMANDE - PURPOSE OF THE REQUEST

Selon votre demande du 25/07/2011 According to your order

référence : /
référence

reçue le : 28/07/2011
supplied on

Essais chimiques Chemical tests

ECHANTILLON(S) - SAMPLE(S)

Réf 1 Serre pantalon DOOWAH

Le responsable de l'étude Responsible for the test
Evelyne UISETTI

Nombre de pages / pages' number: 7 Annexes /annexs : 2 3 cartelles jointes / enclosed samples

Annexe(s) annex(s)

LYC-11-4053 de Mulhouse (2 pages) +SATRA SPC0197279/1134 (5 pages)

Portées disponibles sur :
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Accréditations N°:
Ecully 1-0101
Mazamet 1-0513
Mulhouse 1-0241
Troyes 1-0110
Villeneuve d'Ascq 1-0071

« Pour déclarer ou non la conformité à la spécification, il n'a pas été tenu explicitement compte de l'incertitude associée au résultat. »

The uncertainty associated to the result was not explicitly taken in consideration to declare the conformity to the specification"

Extrait des conditions générales de vente : Les rapports délivrés suite aux essais effectués sur des échantillons ne concernent que ces seuls échantillons et ne sauraient par conséquent se rapporter au lot sur lequel ces échantillons ont été prélevés. Seuls les documents sur papier en-tête de l'institut, portant les signatures originales font foi. Seule la version en langue française fait foi. Le client dispose d'un délai de 30 jours à compter de la réception du rapport d'essais pour signaler par écrit toute omission dans le rapport et pour formuler toute réclamation.

Extract of the general terms and conditions. The reports sent following the tests carried out on samples involve said samples only and consequently shall not cover the lot of origin of the samples. Only documents on the institute's letterhead bearing original signatures are valid. Only the version in French is valid. The customer has a period of 30 days from receipt of the test report to advise the institute of any omissions in the report and file any claims.

Direction Régionale Rhône-Alpes PACA
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Rapport / Test report n° LYC- 11-4053

FICHE DESCRIPTIVE DES ECHANTILLONS SOUMIS

ECHANTILLON SAMPLE R1

Référence client *Client reference*

DOOWAH

Type de produit *Type of product*

serre pantalon numi d'une bande rétro-réfléchissante VIZLITE 201
cousu sur support textile

R1A

Coloris *Color*

noir

R1B

Coloris *Color*

jaune fluo

V2-09-09

Rapport / Test report n° LYC- 11-4053

ACCESSOIRES DE VISUALISATION POUR USAGE NON PROFESSIONNEL MESURES PHOTOMETRIQUES

Matières rétro réfléchissantes de type 2 ou type 3

VISIBILITY ACCESSORIES FOR NON-PROFESSIONAL USE

PHOTOMETRIC MEASURES

Type 2 or 3 retroreflective materials

NF EN 13356 : 2001

ECHANTILLONS SOUMIS / TEST SPECIMENS

R1: serre pantalon D00WAH

RESULTATS / RESULTS

Conditions de mesure Measuring conditions CEI 54 : 1982

Essais réalisés à IFSTTAR et au SATRA Tests carried out at IFSTTAR and SATRA

Angle observation Observation angle α	Coefficient de rétro réflexion Retro reflexion coefficient (cd/lx.m ²)					
	Angle illumination Enlèvement angle 5°b1		Angle illumination Enlèvement angle 20°b1			
	Résultat Result		Spec	Résultat Result		Spec
	0°	90°		0°	90°	
Essai à neuf Test as new	12' (0.2°)	195,0	-	110	112,3	-
	20' (0.33°)	125,3	-	80	72,0	-
	130 (1.5°)	47,2	-	4	34,3	-
Après abrasion After abrasion	12' (0.2°)	399,3	-	110	379,9	-
	20' (0.33°)	278,3	-	80	265,6	-
	130 (1.5°)	24,9	-	4	23,3	-
Après variation de température After temperature variation	12' (0.2°)	425,3	-	110	429,4	-
	20' (0.33°)	293,8	-	80	296,0	-
	130 (1.5°)	25,0	-	4	23,6	-
Après flexion basse température After low temperature flexing	12' (0.2°)	422,4	-	110	430,4	-
	20' (0.33°)	299,6	-	80	303,7	-
	130 (1.5°)	26,8	-	4	24,6	-
sous la pluie under the rain	12' (0.2°)	110,0		110		

Surface de l'accessoire Accessorie surface (cm ²)	19,0
R (mcd.lx-1): coefficient minimal de rétro réflexion sous / retroreflective minimal coefficient under $\alpha = 0.33^\circ$ et/ and $b1 = +5^\circ$	238
surface minimum pour minimal surface for R >400 mcd.lx-1 (cm ²)	31,9

L'accessoire présenté en référence ne satisfait pas aux exigences de la norme NF EN 13356 de coefficient minimum de rétro réflexion

The accessory presented in reference fail the requirements of the standard NF EN 13356 regarding minimum coefficient of retroreflexion

Dans le cas de test sur un matériau seul non monté en accessoire servant à fabriquer des accessoires conformes à la norme NF EN 13356, la surface de ces accessoires devra être supérieure à : 31,9 cm² pour obtenir la conformité

If a test is carried out on a single material non assembled in accessorie used to manufacture accessories conform EN 13356, the surface of these accessories should be superior to: 31,9 cm² in order to obtain the conformity

* Mesure effectuée pour les matériaux sensibles à l'orientation. Les résultats de ce rapport ne sont valables que pour les échantillons soumis à l'essai à l'IFTH
Results of this test report are only valid for specimens subjected to testing at IFTH

Rapport / Test report n° LYC- 11-4053

DETERMINATION DE LA VALEUR DU pH DE L'EXTRAIT AQUEUX DETERMINATION OF pH VALUE OF AQUEOUS EXTRACT

NF EN ISO 3071 :2006

Essai effectué sous couvert de l'accréditation COFRAC
Test carried out according to COFRAC accreditation

CONDITIONS OPERATOIRES / PROCESS CONDITIONS

Prelevement Sample : 2 échantillons pour essai de / testing specimens 2,00 g +/- 0,05 g

Agitation dans 100 ml de la solution d'extraction (A ou B) pendant 2h +/- 5 min

Agitation in 100 ml of extraction solution (A or B) during 2h +/- 5 min

Détermination du pH de la solution d'extraction / pH determination for extraction solution

Détermination du pH des deux extraits et calcul de la moyenne à 0,1 près / pH determination of two extracts and calculation of the average at the nearest 0,1

Types de solution d'extraction utilisée / Type of extraction solution used :

- Type A (eau de qualité 3 selon la norme NF EN ISO 3696 / water grade 3 according to NF EN ISO 3696

- Type B (solution de KCl / KCl solution)

Date de l'essai / Date of the test : 9/6/2011

ECHANTILLONS SOUMIS / TEST SAMPLES

R1 : Serre pantalon D00WAH

R1A : coloris noir

R1B : coloris jaune fluo

RESULTATS / RESULTS

Température de la solution d'extraction / Temperature of the extract solution : 22,2°C

Référence Reference	Solution d'extraction: A / Extract solution: A			
	pH de la solution d'extraction pH value of solution extract	1ère mesure de l'extrait 1st extract pH-measure	2ème mesure de l'extrait 2nd extract pH-measure	Moyenne pH pH Average
R1A	6,0	6,62	6,60	6,6
R1B	6,0	6,24	6,28	6,3

OBSERVATIONS / COMMENTS

Rapport / Test report n° LYC- 11-4053

SOLIDITE DES TEINTURES A LA SUEUR TESTS FOR COLOUR FASTNESS TO PERSPIRATION

NF EN ISO 105-E04 : 2009

Essai effectué sous couvert de l'accréditation COFRAC
Test carried out according to COFRAC accreditation

CONDITIONS OPERATOIRES / PROCESS CONDITIONS

Deux éprouvettes en contact avec les tissus témoins sont immergées dans deux solutions de pH différent contenant de l'histidine, puis égouttées et placées sous pression à $37^\circ\text{C} \pm 2^\circ\text{C}$ pendant 4 heures

Préparation de deux solutions :

- pH 5,5 (Acide)
- pH 8 (Basique)

Les éprouvettes sont séchées à l'air à une température inférieure à 60°C

L'évaluation de la dégradation de la coloration de chaque éprouvette et du dégorgement du tissu témoin est réalisée au moyen des échelles de gris

Avenant opérateur (AO_LYC_003) à la norme sur la préparation des éprouvettes

Two test specimens fastened to the adjacent fabrics are steeped in two solutions with different pH value containing histidine, then drained and placed under pressure for 4 hours at a temperature of $37^\circ\text{C} \pm 2^\circ\text{C}$.

Preparation of two bath solutions :

- pH 5,5 (acid)
- pH 8 (alkaline)

The test specimens are air-dried at a temperature lower than 60°C

The grey scale is used to assess the change in colour of each specimen and to evaluate the staining of the adjacent fabric.
Operating amendment (AO_LYC_003) for the standard about specimen preparation.

Date de l'essai / Date of the test : 9/2/2011

ECHANTILLONS SOUMIS / TEST SAMPLES

R1: Serre pantalon D00WAH
R1A: Coloris noir
R1B: Coloris jaune fluo

RESULTATS / RESULTS

Ref	pH	COTATION / GRADING						
		Nuance (dégradation) <i>Shade (change of colour)</i>	Dégorgement des fibres <i>Fiber Staining</i>					
			Acetate	Coton <i>Cotton</i>	Polyamide	Polyester	Acrylique <i>Acrylic</i>	Laine <i>Wool</i>
R1A	5,5	5	5	5	4-5	5	5	5
	8	5	2	5	5	4-5	5	5
R1B	5,5	5	4-5	4-5	4-5	5	5	4-5
	8	5	4-5	4-5	4	5	5	5

OBSERVATIONS / COMMENTS

Rapport / Test report n° LYC- 11-4053

RECHERCHE QUALITATIVE DU FORMALDEHYDE QUALITATIVE RESEARCH OF FORMALDEHYDE

MTD-LYC-040 Version 1: 2009

CONDITIONS OPERATOIRES / PROCESS CONDITIONS

Extraction du formaldéhyde d'un échantillon de textile dans de l'acide chlorhydrique à 10%.
Réactif colorimétrique utilisé : Réactif de GROSSE et BOHLE

Extraction of formaldehyde of a sample of textile in hydrochloric acid 10%
Colorimetric reagent used: Reagent of GROSS and SUBJECTED BOHLE

Date de l'essai / date of the test : 05/09/2011

ECHANTILLONS SOUMIS / TEST SAMPLES

R1: Serre pantalon D00WAH
R1A: Coloris noir
R1B: Coloris jaune fluo

RESULTATS / RESULTS

R1A: Négatif
R1B: Négatif

OBSERVATIONS / COMMENTS

Rapport / Test report n° LYC- 11-4053

ACESSOIRES DE VISUALISATION POUR USAGE NON PROFESSIONNEL Chapitre 4.1 Exigences générales

VISIBILITY ACESSORIES FOR NON PROFESSIONAL USE
Chapter 4.1 General exigences

NF EN 13356 :2001

Référence de l'échantillon *Sample reference:* R1 Serre pantalon DOOWAH

Type d'accessoires *accessories type:* Type 2

Catégories d'accessoires *Accessories category:* Flexible *flexible*

Dimension de l'accessoire *Accessories size:* 38 cm x 2,4 cm

Date de l'essai *Date of the test:* 02/09/2011

Chapitre 4.1 surface des matières rétroréfléchissante retroflextive material surface:

Surfaces minimales de matière rétroréfléchissante <i>Minimal surface of retroflextive material</i>	
Type <i>Type</i>	Surface minimum en cm^2 <i>Minimal surface in cm^2</i>
Type 1	entre <i>between</i> 15 et 50 cm^2
Type 2 ou3	supérieur à <i>upper at</i> 15 cm^2

Si l'accessoire de type 1 n'est rétroréfléchissant que sur 2 côtés : l'épaisseur maximale de l'accessoire doit être de 10 mm
If the accessory type 1 is retro-reflecting on 2 sides: the maximum thickness of the accessory shall be 10 mm

RESULTATS / RESULTS

- Surface de matière rétroréfléchissante (cm^2) : 19,0
- *Surface of retroreflective material (cm^2):*

**CONFORME
PASS**

DETERMINATION DE LA VARIATION DES DIMENSIONS A LA PRESSE VAPEUR
DETERMINATION OF DIMENSIONAL CHANGE TO PRESS STEAM

NF G 07-212 : 2001

Essai effectué sous couvert de l'accréditation COFRAC
Test carried out according to COFRAC accreditation

CONDITIONS OPERATOIRES / PROCESS CONDITIONSAtmosphère de conditionnement et d'essai *Testing and conditioning atmosphere* : $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$, $\text{HR/RH} 65\% \pm 4\%$ Prélèvement *Sample(s)* 2 éprouvettes *samples* 300 x 300 mmMesure à plat *Flat measurement*Traitements/ *Treatments* : 5 cycles de 10 secondes de vaporisation et 10 secondes d'aspiration
*5 cycles of 10 seconds of spray and 10 seconds of aspiration*Ecartement entre plateaux *spacing between plates* : 10 mmOuverture vanne débit vapeur *steam valve opening speed* : 3 tours *laps*Date de l'essai *Date of the test* : 05/09/2011**ECHANTILLONS SOUMIS / TEST SAMPLES**

R1: LOLITA

RESULTATS / RESULTS

Ref	Variations dimensionnelles (%) / Dimensional change (%)					
	Chaine / Warp			Trame / Weft		
	Eprouvette 1 <i>Sample 1</i>	Eprouvette 2 <i>Sample 2</i>	Moyenne <i>Average</i>	Eprouvette 1 <i>Sample 1</i>	Eprouvette 2 <i>Sample 2</i>	Moyenne <i>Average</i>
R1	-1,7	-1,4	-1,6	-0,7	-0,4	-0,6

OBSERVATIONS / COMMENTS

Mulhouse, 13 septembre 2011

Envoi du : 25 août 2011

(*Your letter*)

Réception échantillon(s) : 25 août 2011

(*Sample(s) submitted on*)

Référence :

(*Reference*)

ZEFAL
ZI LES CAILLOUX
45150 JARGEAU

RAPPORT D'ESSAI (*Report*) LYC-11-4053

Objet de la demande (*Object of request*) :

Dosages sur articles textiles

Le responsable de l'étude (*Study Manager*)



Claudine BURGARD

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(*This report can only be duplicated in its complete form*)

Il comporte 02 pages et 0 annexe (*It contains 02 pages and 0 appendices*)

*Essai réalisé sous couvert de l'accréditation COFRAC (*Test performed under COFRAC accreditation*).

CONDITIONS GENERALES ART 1 -Toutes les demandes d'essai ou d'étude doivent être présentées par écrit. Elles doivent indiquer avec précision : l'identité et l'adresse du demandeur, le nombre, la nature, la dénomination et les références des échantillons soumis, l'objet du travail demandé. ART 2 -Les demandes sont classées dans l'ordre de leur réception et les travaux entrepris dans le même ordre. En cas d'urgence, un travail pourra exceptionnellement être effectué en priorité. Dans ce cas, l'IFTI pourra majorer le prix courant que le demandeur est réputé connaître et accepter. ART 3 -Les rapports et observations ne sont valables que pour les échantillons soumis à l'IFTI, un témoin pourra être remis au demandeur, munie du sceau de l'IFTI et joint au rapport. ART 4 -L'IFTI ne peut être tenu responsable des diverses interprétations et de l'usage qui pourraient être faits des rapports et observations. D'autre part, l'utilisation du nom de l'IFTI est subordonnée à l'accord préalable et écrit de la direction régionale de l'IFTI concernée. ART 5 -La partie non utilisée des échantillons est conservée pendant une durée d'au moins trois mois à compter de la date du rapport, excepté si les matières ou produits susceptibles de subir une altération. ART 6 -Le règlement des travaux doit être effectué au comptant net sans escompte. Pour déclarer ou non la conformité à la spécification, il n'a pas été fait explicitement compte de l'incertitude associée au résultat.

GENERAL CONDITIONS ART 1 -Any testing or study inquiry should be formulated in written form. Any inquiry should clearly mention requester identity and address, the number, nature, designation and references of submitted samples, scope of work required. ART 2 -Inquiries are classed in receipt order and works are to be carried out in that order. In an emergency and only in this particular instance a work having been given priority over the others may be carried out. In that case, INSTITUT FRANCAIS TEXTILE-HABILLEMENT will put a surcharge on the normal price deemed to be known and accepted by the requester. ART 3 -Reports and comments only are valid for samples which were submitted to the INSTITUT FRANCAIS TEXTILE-HABILLEMENT. A control sample with the seal of INSTITUT FRANCAIS TEXTILE-HABILLEMENT attached to the report could be delivered to the requester. ART 4 -INSTITUT FRANCAIS TEXTILE-HABILLEMENT may not be accountable for the different interpretations of reports and comments that could be made. On the other hand the use of the name INSTITUT FRANCAIS TEXTILE-HABILLEMENT is subordinated to the prior and written agreement of INSTITUT FRANCAIS TEXTILE-HABILLEMENT's regional direction concerned. Art 5 -The unused part of the samples is kept for a minimum three month period, starting from the date of the report, to the exception of materials or products liable to alteration. Art 6 -Works are to be paid net, in full without any discount!

Direction Régionale Est

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SIRET 433 430 832 00041



ACCREDITATION
N° 1-0241*
Portée disponible sur
www.cofrac.fr

Détermination de certaines amines aromatiques dérivées de colorants azoïques* (Detection and analysis of aromatic amines on textile supports*)

Méthode d'essai : La détection et le dosage de certaines amines aromatiques dérivées de colorants azoïques et répertoriées, ont été réalisés selon les méthodes NF EN 14362-1:05-2004, ou NF EN 14362-2: 05-2004 (dans le cas de fibres polyester), ou DIN 53316:03-1997 (dans le cas de cuir).

Control Method : The detection and the analysis of certain aromatic amines were done according to the methods EN 14362-1:05-2004, or EN 14362-2:05-2004 (in presence of polyester fibers), or DIN 53316:03-1997 (on leather support).

Conditions opératoires (Testing parameters) :

Les techniques analytiques employées pour la détermination de certaines amines aromatiques dérivées de colorants azoïques sont les suivantes : HPLC/DAD (Chromatographie liquide / Déetecteur UV à barrettes de diodes), GC/MS (Chromatographie gaz / Déetecteur Spectrométrie de Masse) et/ou LC/MS/DAD (Chromatographie liquide / Déetecteur Spectrométrie de Masse / Déetecteur UV à barrettes de diodes).

The analytical methods performed for the detection and analysis of aromatic amines on textile supports are : HPLC/DAD (Liquid Chromatography / UV Detection), GC/MS (Gas Chromatography / Mass Detection) and/or LC/MS/DAD (Liquid Chromatography / Mass Detection / UV Detection)

Liste des amines aromatiques proscrites conformément à la restriction (entrée 43) de l'Annexe XVII du règlement REACh et recherchées lors des contrôles

(List of the banned amines according to REACh regulation, Annex XVII Restriction (Entry 43), and analysed during these controls)

Nom de amines (Name of the amines)	CAS Nr	Nom de amines (Name of the amines)	CAS Nr
4-Aminobiphényle	92-67-1	3,3'-Diméthylbenzidine	119-93-7
Benzidine	92-87-5	3,3'-Diméthyl-4,4'-diaminobiphényleméthane	838-88-0
4-Chloro-o-toluidine	95-69-2	p-Crésidine	120-71-8
2-Naphtylamine	91-59-8	4,4'-Méthylène-bis-(2-chloroaniline)	101-14-4
o-Aminoazotoluène	97-56-3	4,4'-Oxydianiline	101-80-4
2-Amino-4-nitrotoluène	99-55-8	4,4'-Thiodianiline	139-65-1
4-Chloroaniline	106-47-8	o-Toluidine	95-53-4
2,4-Diaminoanisole	615-05-4	2,4-Toluylénediamine	95-80-7
4,4'-Diaminodiphényleméthane	101-77-9	2,4,5-Triméthylaniline	137-17-7
3,3'-Dichlorobenzidine	91-94-1	o-Anisidine	90-04-0
3,3'-Diméthoxybenzidine	119-90-4	4-aminoazobenzène	60-09-3

Références des articles contrôlés - Résultats (Sample reference - Results)

Référence des échantillons (Sample reference)	Concentration de chacune des 22 amines proscrites en ppm ou mg/kg (Concentration in ppm, or mg/kg, of each amine from the 22 banned)	REACh Restriction Annex XVII Entry 43
serre pantalon DOOWAH Contrôle réalisé sur : tissu coloris jaune fluo tissu coloris noir fluo	< 30 ppm	Conforme (PASS)

Client: Institut Francais Textile – Habillement
Avenue Guy de Collongue
69134 Ecully Cedex
France

Att: David Mellet

Technical Report

Subject: TESTING OF RETRO-REFLECTIVE MATERIAL REFERENCED
“SERRE PANTALON D00WAH” IN ACCORDANCE WITH EN13356:2001
4.2.8 PHOTOMETRIC REQUIREMENTS UNDER THE INFLUENCE OF
RAINFALL.

Client ref: PO G01787
SATRA ref: SPC0197279/1134
Date: 14th September 2011

Conditions of Issue:

This report may be forwarded to other parties provided that it is not changed in any way. It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.

Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only.

Tests marked † fall outside the UKAS Accreditation Schedule for SATRA. All interpretations of results of such tests and the comments based upon them are outside the scope of UKAS accreditation and are based on current SATRA knowledge.

A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the client as a result of information supplied in the report.

Report signed by: M Gamble
Position: PPE Technologist
Department: Safety Product Centre

WORK REQUESTED

A sample of retro-reflective material, see details below, was received by SATRA on the 26th August 2011 for testing in accordance with EN13356:2001 clause 4.2.8 Photometric performance under the influence of rainfall, only.

CONCLUSIONS

SAMPLE REFERENCE	STANDARD	CLAUSE / PROPERTY	PASS / FAIL
SERRE PANTALON D00WAH	EN13356:2001	4.2.8 Photometric performance under the influence of rainfall.	PASS

TESTING

Retro-reflectivity testing was carried out on the 13th September 2011. The sample was considered as a type 2 removable accessory.

The sampled retro-reflective material was measured as a piece 1.8x10cm. Unless otherwise stated, samples were conditioned for at least 24 hours in a controlled environment maintained at $20 \pm 2^\circ\text{C}$ and $65 \pm 5\%$ relative humidity.



REQUIREMENTS

4.1 General Requirements

The accessories shall meet requirements of area as well as retroreflection. Each type 2 and 3 accessory shall exceed the area of 15 cm²

Table 1 – EN13356:2001 Minimum coefficient of specific retroreflection value R' type 2 & 3 accessories – cd/lx/m²

Observation angle α	Entrance angle β	
	$\beta_1 = + 5^\circ$ $\beta_2 = 0^\circ$	$\beta_1 = + 20^\circ$ $\beta_2 = 0^\circ$
0.2° (12')	110	80
0.33° (20')	80	60
1.5° (1° 30')	4	3

4.2.2 The minimum area for type 2 and type 3 accessories shall meet the minimum CIL value $R = 400$ mcd/lx in all directions about the person at $\alpha = 0.33^\circ$ (20'), $\beta_1 = + 5^\circ$.

Table 1 – EN13356:2001 Minimum coefficient of specific retroreflection value R' type 2 & 3 accessories after test exposure – cd/lx/m²

Observation angle α	Entrance angle β	
	$\beta_1 = + 5^\circ$ $\beta_2 = 0^\circ$	
0.2° (12')		110

TEST RESULTS

Table 4 – Test Exposure for flexible accessories

Testing of high visibility product SERRE PANTALON D00WAH in accordance with EN13356:2001

Observation angle α 0.2° (12')	Entrance angle β		Uncertainty of Measurement (UoM) %	
	$\beta_1 = +5^\circ$ $\beta_2 = 0^\circ$			
	x Orientation – cd/lx/m ²	Requirement – cd/lx/m ²		
Photometric results after:			± 8.0 (See note 1)	
4.2.8 Influence of rainfall	166	110		

ADDITIONAL INFORMATION / NOTES

Note 1 – ‘UoM’ denotes estimated Uncertainty of Measurement for stated test results. This uncertainty value is based on a standard uncertainty multiplied by a coverage factor $k = 2$, which provides for a confidence level of approximately 95%

***** END OF REPORT *****

TERMS AND CONDITIONS OF BUSINESS

1. GENERAL

Work done or services undertaken are subject to the terms and conditions detailed below and all other conditions, warranties and representations, expressed or implied are hereby excluded.

2. PRICES

Prices are based on current material and production costs, exchange rates, duty and freight and are subject to change without notice.

3. DELIVERY ESTIMATES

Delivery estimates are made in good faith and date from receipt of a written order and full information to enable us to proceed. While SATRA or its subsidiaries (hereafter referred to as "SATRA") make every effort to fulfil them, such estimates are subject to unforeseen events and if not maintained, cannot give rise to any claim. Offers "ex stock" are subject to prior sale.

4. CANCELLATION AND RETURNS

Cancellation of orders for goods, services, training or consultancy is only acceptable by prior agreement of SATRA and a charge will normally be made.

5. CLAIMS

Claims for errors, shortages etc should be notified within 10 days of date of receipt. In the event of goods damaged in transit, packing materials should be retained for examination; otherwise no liability can be accepted.

6. PAYMENT TERMS

Payment terms are net 21 days from date of invoice. Failure to comply with the terms of payment may result in delayed delivery of goods and services and a review of the Customer's credit account. Should the customer become subject to an administration order, or becomes bankrupt or goes into liquidation, SATRA has a right to cancel any contract and discontinue any work. SATRA reserves the right to adjust US Dollar and Euro sales price where customer exceeds credit terms and where the exchange rate has moved more than 10% since invoicing.

7. RETENTION OF TITLE

All goods remain the property of SATRA until paid in full. Under no circumstances will a customer's purchase order override SATRA's Retention of Title clause. In the case of software, the ownership of the software remains with SATRA. Payment of invoices in full will entitle the customer to use the software under licence until (a) they cease to be a member of SATRA or (b) they cease trading. In both instances, the licence shall then revert to SATRA.

8. GUARANTEE

All goods manufactured by SATRA are guaranteed both as regards material and workmanship. Any part returned carriage paid, within twelve months from date of supply and found defective, will be repaired or replaced at SATRA's option free of charge. SATRA admits no liability for loss, damage or delay consequent on any defect in any goods supplied by SATRA.

9. TEST REPORTS

Results given in test reports refer only to samples submitted for analysis and tested by SATRA. A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the Customer as a result of information supplied in a test report.

10. TEST SAMPLES

Unless otherwise agreed in advance, test samples will be disposed of 6 weeks after the date of the final report. If required, samples can be returned at the Customer's expense.

11. RESPONSIBILITY

Every effort is made to ensure accuracy in description, drawings and other information in correspondence, catalogues, etc but no warranty is given in this respect and SATRA shall not be liable for any error therein. SATRA carries out all tests and/or advises only on the basis that the same are carried out, made or given without any responsibility whether for negligence or otherwise. SATRA and its servants or agents will not be liable for any damage or loss direct or indirect of whatsoever kind, whether or not the same results directly or indirectly from negligence on the part of SATRA or its servants or agents.

12. CONFIDENTIALITY

Unless specifically excluded in the terms of an individual contract between SATRA and its Customer, the following shall apply to all reports, advice, drawings, photographs, specifications or data:

- i. The above shall not be disclosed to third parties or used in litigation without the consent of SATRA.
- ii. Where SATRA has given consent to disclosure, the Customer shall draw the attention of the third party to these terms of business and the basis on which SATRA undertakes test, reporting and advising. The Customer shall indemnify SATRA for any failure to do so.
- iii. The above items are submitted to the Customer as confidential documents. Confidentiality shall continue to apply after completion of the business, but shall cease to apply to information or knowledge which may come into the public domain.

13. CONSTRUCTION AND ARBITRATION

The laws of England shall govern all contracts and the parties submit to exclusive jurisdiction of the courts of England, unless otherwise agreed.

Issue Date: 1st October 2009