## E3. Declaration of Conformity

Declaration of Conformity to ANSI/ISEA 107-2020, High-Visibility Safety Apparel

Certificate No. V70332-2020
Supplier name and address: Tingley Rubber Corporation
1551 S. Washington Ave., Suite 403
Piscataway, NJ 08854
Product information (name, model number, part number or other information as applicable):
Class 3 Mesh, Two Tone Zipper Front Vest, Fluorescent Yellow-Green
Model Number: V70332
Company declares that the above product meets all set requirements as stated in ANSI/ISEA 107-2020 as a compliant high-visibility safety item for Performance Class <u>3</u> ., Type <u>R</u> ; All relevant materials have been tested with documents referenced under this certificate number. This item meets all design requirements and has been measured for appropriate amount of visible reflective material and background materials for the smallest size offered for this product.

## 1. VISIBLE BACKGROUND MATERIAL:

Amount of visible background material (smallest size offered):

>0.80m<sup>2</sup> (1240 in.<sup>2</sup>)

Please list each material that contributes towards the amount **VISIBLE BACKGROUND MATERIAL** listed above. Use separate sheet for addition materials.

#### Material 1 Identification

Test Lab: Intertek	Material Type: X Knitted
Report #: GZHT91065435	Material Content (such as Polyester, Modacrylic, and others): 100% Polyester
Date: 10/18/2021	Weight: 3.05 oz Color: Fl. Yellow-Green
Description: 100% Polyester Mesh	

#### Material 2 Identification

Test Lab: Intertek	Material Type: X Knitted  Woven  Other:
Report #: GZHT91065356	Material Content (such as Polyester, Modacrylic, and others): 100% Polyester
Date: 10/18/2021	Weight: 3.05 oz Color: Fl. Orange-Red
Description: 100% Polyester Solid	

#### **Material 3 Identification**

Test Lab:	Material Type:  Knitted  Woven  Other:
Report #:	Material Content (such as Polyester, Modacrylic, and others):
Date:	Weight: Color:
Description:	

## Declaration of Conformity (page 2 of 2)

#### 2. VISIBLE RETROREFLECTIVE MATERIAL

• Amount of visible retroreflective material (smallest size offered) >0.20m<sup>2</sup> (310 in.<sup>2</sup>)

Please list each type of material that contributes towards VISIBLE RETROREFLECTIVE MATERIAL listed above.

#### **Material 1 Identification**

Test Lab: Intertek			
Report #: GZHT91065162			
Date: 10/18/2021 Style #: 1303-2			
Description: 50mm wide sew on silver reflective trim			

## **Material 2 Identification**

Test Lab:	
Report #:	
Date:	Style #:
Description:	

\*Use separate sheet for additional materials

## 3. OVERALL LUMINANCE

Check here if test report for optional Overall Luminance testing is attached.

The undersigned hereby warrants that he/she is authorized to legally bind the company identified above.

Signed: Mighan BOWSIR	Title:	Product Manager
J		

Print Name: Meghan Bowser

\_\_\_\_\_\_Date: \_\_\_\_8/17/22

# Intertek

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Issued To:

## **Certificate of Test**

Our Reference No.: GZHT9106543502

Certificate Issue Date: Oct 18, 2021

OFFICE ROOM 1809.#3 BUILDING DEYING INT'L PLAZA,#222 CHANGHONG ROAD. YUHUATAI DISTRICT, NANJING 210012 ANNE WANG

**TRC NANJING REPRESENTATIVE** 

Attn:

Description: One (1) piece of submitted sample said to be Hi-Vis Yellow Polyester Mesh, 110gsm.

We Hereby Declare That The Sample Described Above Has Been Tested By Intertek Testing Services Shenzhen Ltd. Guangzhou Branch And Meets The Requirements Of The Following Selected Tests Of ANSI/ISEA 107-2020.

Color Performance Of Background And Combined-performance Materials Colorfastness To Crocking Of Background Material Color Fastness To Perspiration Of Background Material Colorfastness To Water Of Background Material Color Fastness To Laundry Of Background Material Dimension Change Of Background Material Bursting Strength Bursting Strength

The test results are given in our report No.: GZHT91065435 Dated: Oct 18 Dated: Oct 18, 2021

Note:

- This Declaration Applies To The Particular Sample Tested And To The Specific Tests Carried Out As Dated And Detailed In The Report(S) Referenced Above. This Certificate Is Valid Only For The Applicant's Selected Test Items And Must Not Be Used Without 1
- 2 The Attached Test Report.
- This Certificate Must Not Be Confused Neither With The EU Type Examination Certificate Released 3 By Nofified Body Nor With The Conformaity Declaration Released By Manufacturer.

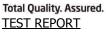
Authorized By: For Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Guiliang Dong Senior Lab Manager

Page 1 Of 1

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch 深圳天祥质量技术服务有限公司广州分公司 ネガリスキーの単式: 木取 第7月7月20日 Room 02, 1-8/F. & Room 01, F101/E201/E301/E402/E501/E601/E701/E801, No.7-2, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, Guangdong, China 广州经济技术开发区科学研究策略 7 号 之二第1-18 長 02 房、01 房 101、 E201、E301、E401、E501、E601、E701、E801 Tel: +86 208213 9001 Pax: +86 20 82089999 Postcode: 510663 (6)







Applicant: TRC NANJING REPRESENTATIVE OFFICE ROOM 1809,#3 BUILDING, DEYING INT'L PLAZA,#222 CHANGHONG ROAD, YUHUATAI DISTRICT,NANJING 210012 Date: Oct 18, 2021

t 18, 2021

Attn: ANNE WANG

Sample Description: One (1) piece of submitte	ed sample s	aid to be Hi-Vis Yellow Polyester Mesh, 110gsm.
Standard	:	ANSI/ISEA 107-2020
Buyer	:	Tingley Rubber Corporation
Ref. No.	:	Hi-Vis YG Polyester Mesh, 110gsm, #SF210815M
Goods Exported to	:	U.S.A
Date Received/Date Test	Started	Sep. 17, 2021
Date Final Information Co	onfirmed/	/Oct. 15, 2021
Date Payment Received:		

Test Result Please Refer To Attached Page(S).

Should you have any query on this report, you may contact at <u>gzfootwear@intertek.com</u>

Authorized By: For Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Guiliang Dong Senior Lab Manager

JO / lydiayang



Page 1 Of 8

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch 深圳天祥质量技大服务角限公司广州分公司 Room 02, 1-8/F. & Room 01, E101/E201/E301/E401/E501/E601/E701/E801, No.7-2, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, Guangdong, China 广州经济技术开发区科智规智频路 7 员之二第二名是 02 房、01 房 101、 E201、E301、L401、E501、E605、701、E801 Tel: +86 208213 9001 Pax: 186 20 82089909 Postcode: 510663

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TEST REPORT

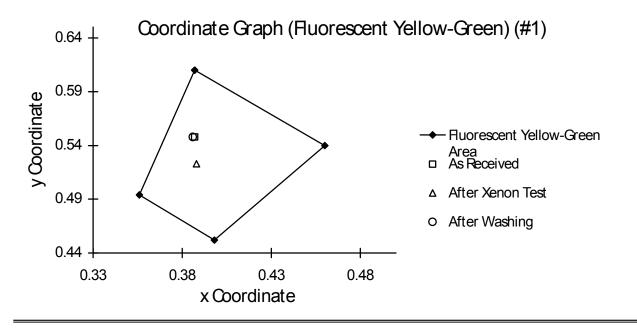
GZHT91065435 Number:

Tests Conducted (As Requested By The Applicant)

Color Performance Of Background And Combined-performance Materials (ANSI/ISEA 107-2020, 8.1.1 (Prior To Exposure Tests) & 8.1.2 (After Xenon Test) & ASTM E1164-17) 1

Sample	Color	Pre-condition	Chromaticity Coordinates		Total Luminance Factor	Requirement	Pass/Fail	
			З	х	У	Y (%)		
-	Fluorescent	As	<b>0</b> °	0.3866	0.5475	91	-	-
	Yellow- Green	Received (#1)	90°	0.3867	0.5475	91	-	-
			Mean	0.387	0.548	91	*	Pass
		After Xenon	0°	0.3874	0.5233	83	-	-
		Test (# & #1)	90°	0.3881	0.5235	84	-	-
			Mean	0.388	0.523	84	*	Pass
Note: The Specimen Is Backed By A Black Underlay With A Reflectance Of Less Than 0.04.								

Sample	Color	Pre-Condition	Chrom	naticity Coo	rdinates	Total Luminance Factor	<u>Applicant's</u> <u>Requirement</u>	Pass/Fail
			ε	X	У	Y (%)		
-	Fluorescent	After Washing	<b>0</b> °	0.3861	0.5486	96	-	-
	Yellow- Green	(#1 & #2)	90°	0.3867	0.5480	98	-	-
			Mean	0.386	0.548	97	*	Pass
Note: The Specimen Is Backed By A Black Underlay With A Reflectance Of Less Than 0.04.								



/ lydiayang

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch 深圳天祥质量技术服务新成公司、州分公司 Room 02, 1-8/F. & Room 01, E101/E201/E301/E402/E501/E601/E701/E801, No.7-2, Caipin Road, Guangzhou Science City, GETDB, Guangzhou, Guangdong, China 广州经济技术开发区科学规论频路 7 号之二第1-8 号 02 房、01 房 101、 E201、E301、A401、E501、E605、101、E801 Tel: +86 208213 9001 Pax: +86 20 82089999 Postcode: 510663 6

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Total Quality. Assured. <u>TEST REPORT</u> Tests Conducted (As Requested By The Applicant)

### Cont

Remark: \* =

Color	Chromaticity Coordinates		Minimum Total Luminance Factor
	Х	у	Y (%)
	0.387	0.610	
Fluorescent	0.356	0.494	70
Yellow-Green	0.398	0.452	70
	0.460	0.540	

NOTE The Coordinate Of Sample Should Be Inside The Area Specified By The Table Above.

- # = Xenon Test Based On AATCC 16.3-2014, Colorfastness To Light Xenon Arc. Expose The Materials To 40 AATCC Fading Units (170 KJ/m<sup>2</sup>@420nm).
- #1= Two Layers Of The Same Material.
- #2 = ISO 6330:2012, Wash Condition:

10		
	Washing Standard:	ISO 6330:2012
	Machine:	Туре А
	Reagent:	Reference Detergent 3
	Washing Procedure:	4 N
Γ	Bleaching Procedure:	Do Not Bleach
	Drying Procedure:	Do Not Tumble Dry
Γ	Ironing Procedure:	Do Not Iron
Γ	Professional Textile Care Procedure:	Do Not Dry Clean
	Number Of Cycles:	25

/ lydiayang

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## 2 Colorfastness To Crocking Of Background Material (ANSI/ISEA 107-2020, 8.2.1 & AATCC 8-2016)

Preconditioning:	
Temperature:	(20±2)℃
Relative Humidity:	(65±5)%
Period:	24 Hours

Sample	Test Condition	Results	Requirement	Pass / Fail
-	Dry	Grade 4.5	Min. Grade 3.0	Pass
	Wet	Grade 4.5	Min. Grade 3.0	Pass

3 Colorfastness To Perspiration Of Background Material (ANSI/ISEA 107-2020, 8.2.2 & AATCC 15-2013)

Test Condition:	
Load:	4.54 kg
Oven temperature:	(38 ± 1) ℃
Test Period:	6 h ± 5 min

Sample			Requirement	Pass / Fail	
-	Color Change:		Grade 4.5	Min. Grade 4.0	Pass
	Color Stain:	-Acetate	Grade 4.5		
		-Cotton	Grade 4.5		
		-Nylon	Grade 4.0		
		-Polyester	Grade 4.5	Min. Grade 3.0	Pass
		-Acrylic	Grade 4.5		
		-Wool	Grade 4.5		

/ lydiayang

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4 Colorfastness To Water Of Background Material (ANSI/ISEA 107-2020, 8.2.3 & AATCC 107-2013)

Test Condition:Pressure:4.5 kgOven Temperature: $(38 \pm 1) \degree$ Test Period:18 h

Sample		F	Requirement	Pass / Fail	
-	Color Change:	Color Change: Grade 4.5		Min. Grade 3.0	Pass
	Staining	-Acetate	Grade 4.5		
		-Cotton	Grade 4.5		
		-Nylon	Grade 4.0		
		-Polyester	Grade 4.5	Min. Grade 3.0	Pass
		-Acrylic	Grade 4.5		
		-Wool	Grade 4.5		

5 Color Fastness To Laundry Of Background Material (ANSI/ISEA 107-2020, 8.2.3)

: AATCC 61-2013-2A, Modified To Use 105°F (Domestic Laundry)

Sample			Requirement	<u>Pass / Fail</u>	
	Color Change:		Grade 4.5	Min. Grade 4.5	Pass
	Color Stain:	-Acetate	Grade 3.0		
		-Cotton	Grade 3.5		
		-Nylon	Grade 3.0	]	
		-Polyester	Grade 4.0	Min. Grade 3.0	Pass
		-Acrylic	Grade 4.5		
		-Wool	Grade 4.0	]	

Remark: This Test Was Conducted At Room 801/901, No. 8, East BaoYing Road, Huangpu District, Guangzhou.

This Test In The Report Is Not Included In The CNAS Accreditation Schedule For Our Laboratory.

/ lydiayang



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Test Condition: Test Method:





## 6 Dimension Change Of Background Material (Home Laundering) (ANSI/ISEA 107-2020, 8.3 & ASTM D1776-16)

Test Condition: Standard Code: Cleaning Cycles:

AATCC 135-2012 (3)(III)(A)(iii) 5

Sample		Results	Requirement	Pass / Fail
	Length	-1.6%	*	Pass
	Width	-1.6%	*	Pass

Remark: * =	Material Type	Knit Fabrics And All Other Materials		
	Length	Not Exceed $\pm$ 7%		
	Width	Not Exceed $\pm$ 5%		

Remark: This Test Was Conducted At Room 801/901, No. 8, East BaoYing Road, Huangpu District, Guangzhou.

This Test In The Report Is Not Included In The CNAS Accreditation Schedule For Our Laboratory.

/ lydiayang

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch 深圳天祥质量技 決跟 新版公司) 广州分公司 Room 02, 1-8/F. & Room 01 F101/E201/E301/E401/E501/E601/E701/E801, No.7-2, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, Guangdong, China 广州经济技术开发区科学师诊频路 7.9.2 二第十一名 [202]房、01 房 101、 E201、E301、1407、E501、E605、1201、E801 Tel: +86 208213 9001 Pax: 13620 82089909 Postcode: 510663 Page 6 Of 8





7 Bursting Strength Of Knitted Materials And Other Nonwoven Constructions (ANSI/ISEA 107-2020, 8.4.1 & ASTM D6797-07(2015))

Preconditioning:	
Temperature:	(20±2)℃
Relative Humidity:	(65±5)%
Period:	24 Hours

Sample	Specimen	Results	Requirement	Pass/Fail
	1	418.5 N	Min. 178 N	Pass
	2	420.0 N	Min. 178 N	Pass
	3	414.5 N	Min. 178 N	Pass
	4	427.0 N	Min. 178 N	Pass
	5	416.0 N	Min. 178 N	Pass
	Average	419.0 N	Min. 178 N	Pass

Remark: This Test Was Conducted At Room 801/901, No. 8, East BaoYing Road, Huangpu District, Guangzhou.

This Test In The Report Is Not Included In The CNAS Accreditation Schedule For Our Laboratory.

/ lydiayang

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End Of Report

This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct. No copy of the test report(except for full text copy) shall be made without the written approval by Intertek.



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/ lydiayang

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## **Certificate of Test**

## Our Reference No.: GZHT9106535602

TRC NANJING REPRESENTATIVE Issued To: OFFICE ROOM 1809,#3 BUILDING, DEYING INT'L PLAZA,#222 CHANGHONG ROAD, YUHUATAI DISTRICT, NANJING 210012 ANNE WANG

Certificate Issue Date: Oct 18, 2021

Description: One (1) piece of submitted sample said to be Hi-Vis Orange Polyester Knit, Solid, 120gsm.

We Hereby Declare That The Sample Described Above Has Been Tested By Intertek Testing Services Shenzhen Ltd. Guangzhou Branch And Meets The Requirements Of The Following Selected Tests Of ANSI/ISEA 107-2020.

Color Performance Of Background And Combined-performance Materials Colorfastness To Crocking Of Background Material Color Fastness To Perspiration Of Background Material Colorfastness To Water Of Background Material Color Fastness To Laundry Of Background Material Dimension Change Of Background Material **Bursting Strength** 

The test results are given in our report

No.: GZHT91065356 Dated: Oct 18, 2021

Note:

Attn:

- This Declaration Applies To The Particular Sample Tested And To The Specific Tests Carried Out As 1 Dated And Detailed In The Report(S) Referenced Above.
- This Certificate Is Valid Only For The Applicant's Selected Test Items And Must Not Be Used Without 2 The Attached Test Report.
- This Certificate Must Not Be Confused Neither With The EU Type Examination Certificate Released 3 By Nofified Body Nor With The Conformaity Declaration Released By Manufacturer.

Authorized By: For Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Guiliang Dong Senior Lab Manager

Page 1 Of 1

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch 深圳天祥质量技术服务有限公司广州分公司 ネガリスキーの単式: 木取 第7月7月201/E301/E401/E501/E601/E701/E801, Room 02, 1-8/F. & Room 01, E101/E201/E301/E401/E501/E601/E701/E801, No.7-2, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, Guangdong, China 广州经济技术开发区科学城総版路 7 号之二第1-8 层 02 房、01 房 101、 E201、E301、E401、E501、E601、E701、E801 Tel: +86 208213 9001 Pax: +86 20 82089909 Postcode: 510663 (6)





TEST REPORT

Applicant:

Date: Oct 18, 2021

TRC NANJING REPRESENTATIVE OFFICE ROOM 1809,#3 BUILDING, DEYING INT'L PLAZA,#222 CHANGHONG ROAD, YUHUATAI DISTRICT,NANJING 210012

Attn: ANNE WANG

Sample Description:		
One (1) piece of submitted	sample s	aid to be Hi-Vis Orange Polyester Knit, Solid, 120gsm.
Standard	:	ANSI/ISEA 107-2020
Buyer	:	Tingley Rubber Corporation
Ref. No.	:	Hi-Vis OR Polyester Knit, Solid, 120gsm, #SF210820S
Goods Exported to	:	U.S.A
Date Received/Date Test St	arted	Sep. 17, 2021
Date Final Information Con	firmed/	/Oct. 15, 2021
Date Payment Received:		

Test Result Please Refer To Attached Page(S).

Should you have any query on this report, you may contact at gzfootwear@intertek.com

Authorized By: For Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Guiliang Dong Senior Lab Manager

bf / lydiayang



Page 1 Of 7

 Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
 深圳天祥质量技术服务有限公司广州分公司

 深圳天祥版量技术服务有限公司广州分公司
 Room 02, 1-8/F. & Room 01, E101/E201/E301/E401/E501/E601/E501/E801,

 No.7-2, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, Guangdong, China
 广州经济技术开发区科学规控频路70, 2 二第二人后,02 房,01 房 101,

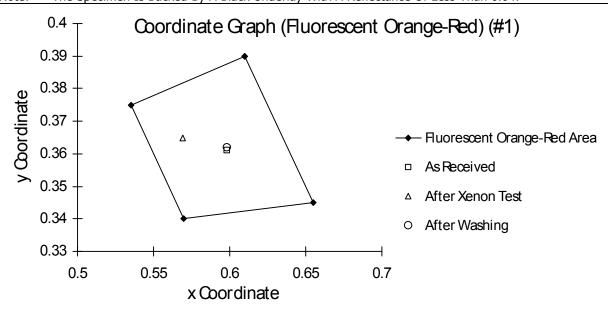
 E201、E301、L01、E501、E601、1201、E801
 Tel: +86 208213 9001 Fax: 156 20 82089909 Postcode: 510663





1 Color Performance Of Background And Combined-performance Materials (ANSI/ISEA 107-2020, 8.1.1 (Prior To Exposure Tests) & 8.1.2 (After Xenon Test) & ASTM E1164-17)

Sample	Color	Pre-condition	Chromaticity Coordinates			Total Luminance Factor	Requirement	Pass/Fail
			ε	x	у	Y (%)		
	Fluorescent	As	0°	0.5973	0.3617	43	-	-
-	Orange -	Received (#1)	90°	0.5980	0.3611	43	-	-
	Red		Mean	0.598	0.361	43	*	Pass
		After Xenon	0°	0.5688	0.3650	47	-	-
		Test (# & #1)	90°	0.5693	0.3644	47	-	-
			Mean	0.569	0.365	47	*	Pass
Note:	The Specimen	Is Backed By A B	lack Unde	rlay With A	Reflectance	e Of Less Than	0.04.	
Sample	Color	Pre-Condition	Chrom	naticity Coo	rdinates	Total Luminance Factor	<u>Applicant's</u> <u>Requirement</u>	Pass/Fail
			Э	х	у	Y (%)		
	Fluorescent	After Washing	0°	0.5981	0.3624	47	-	-
-	Orange -	(#1 & #2)	90°	0.5984	0.3617	46	-	-
	Red		Mean	0.598	0.362	47	*	Pass
Note: The Specimen Is Backed By A Black Underlay With A Reflectance Of Less Than 0.04.								



Intertek Testing Services Shenzhen Ltd. Guangzhou Branch 深圳天祥质量技 決跟 新版公司)广州分公司 Room 02, 1-8/F. & Room 01 F101/E201/E301/E401/E501/E601/E701/E801, No.7-2, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, Guangdong, China 广州经济技术开发区科学规论频路 7.8.2 二第二 6.5.0 2 房、01 房 101、 E201、E301、L00、E501、E605、7.01 K E801 Tel: +86 208213 9001 Fax: 962.0 82089909 Postcode: 510663 Page 2 Of 7





Color Performance Of Background And Combined-performance Materials (Cont)

Remark: \* =

Color	Chromaticity Coordinates		Minimum Total Luminance Factor
	Х	У	Y (%)
	0.610	0.390	
Fluorescent	0.535	0.375	10
Orange-Red	0.570	0.340	40
_	0.655	0.345	

NOTE The Coordinate Of Sample Should Be Inside The Area Specified By The Table Above.

- # = Xenon Test Based On AATCC 16.3-2014, Colorfastness To Light Xenon Arc. Expose The Materials To 40 AATCC Fading Units (170 KJ/m<sup>2</sup>@420nm).
- #1= Two Layers Of The Same Material
- #2 = ISO 6330:2012, Wash Condition:

Washing Standard:	ISO 6330:2012
Machine:	Туре А
Reagent:	Reference Detergent 3
Washing Procedure:	4N
Bleaching Procedure:	Do Not Bleach
Drying Procedure:	Do Not Tumble Dry
Ironing Procedure:	Do Not Iron
Professional Textile Care Procedure:	Do Not Dry Clean
Number Of Cycles:	25

2 Colorfastness To Crocking Of Background Material (ANSI/ISEA 107-2020, 8.2.1 & AATCC 8-2016)

Preconditioning:	
Temperature:	<b>(20±2)</b> ℃
Relative Humidity:	(65±5)%
Period:	24 Hours

Sample	Test Condition	Results	<u>Requirement</u>	Pass / Fail
-	Dry	Grade 4.5	Min. Grade 3.0	Pass
	Wet	Grade 4.5	Min. Grade 3.0	Pass

/ lydiayang



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## 3 Colorfastness To Perspiration Of Background Material (ANSI/ISEA 107-2020, 8.2.2 & AATCC 15-2013)

Test Condition:	
Load:	4.54 kg
Oven temperature:	(38 ± 1) ℃
Test Period:	6 h ± 5 min

Sample			Results	Requirement	Pass / Fail
	Color Change:		Grade 4.5	Min. Grade 4.0	Pass
-	Color Stain:	-Acetate	Grade 4.0		
		-Cotton	Grade 4.5		
		-Nylon	Grade 4.0		
		-Polyester	Grade 4.5	Min. Grade 3.0	Pass
		-Acrylic	Grade 4.5		
		-Wool	Grade 4.0		

## 4 Colorfastness To Water Of Background Material (ANSI/ISEA 107-2020, 8.2.3 & AATCC 107-2013)

Test Condition:Pressure:4.5 kgOven Temperature: $(38 \pm 1) \degree$ Test Period:18 h

Sample		Resu	lts	<u>Requirement</u>	<u>Pass / Fail</u>
	Color Change		Grade 4.5	Min. Grade 3.0	Pass
	Staining	-Acetate	Grade 4.0		
-		-Cotton	Grade 4.5		
		-Nylon	Grade 3.5		
		-Polyester	Grade 4.5	Min. Grade 3.0	Pass
		-Acrylic	Grade 4.5		
		-Wool	Grade 4.0		

/ lydiayang



Page 4 Of 7





## 5 Color Fastness To Laundry Of Background Material (ANSI/ISEA 107-2020, 8.2.3)

Test Condition: Test Method:

ethod: AATCC 61-2013-2A, Modified To Use 105°F (Domestic Laundry)

Sample			Results	Requirement	Pass / Fail
	Color Change:		Grade 4.5	Min. Grade 4.5	Pass
	Color Stain:	-Acetate	Grade 3.5		
		-Cotton	Grade 4.0		
		-Nylon	Grade 3.0		
		-Polyester	Grade 4.0	Min. Grade 3.0	Pass
		-Acrylic	Grade 4.5		
		-Wool	Grade 4.5		

Remark: This Test Was Conducted At Room 801/901, No. 8, East BaoYing Road, Huangpu District, Guangzhou. This Test In The Report Is Not Included In The CNAS Accreditation Schedule For Our Laboratory.

6 Dimension Change Of Background Material (Home Laundering) (ANSI/ISEA 107-2020, 8.3 & ASTM D1776-16)

Test Condition:	
Standard Code:	
Cleaning Cycles:	

AATCC 135-2012 (3)(III)(A)(iii) 5

Sample	Results		Requirement	Pass / Fail
	Length	-2.0%	*	Pass
	Width	-0.8%	*	Pass

Remark: * =	Material Type	Knit Fabrics And All Other Materials
	Length	Not Exceed $\pm$ 7%
	Width	Not Exceed $\pm$ 5%

Remark: This Test Was Conducted At Room 801/901, No. 8, East BaoYing Road, Huangpu District, Guangzhou. This Test In The Report Is Not Included In The CNAS Accreditation Schedule For Our Laboratory.

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7 Bursting Strength Of Knitted Materials And Other Nonwoven Constructions (ANSI/ISEA 107-2020, 8.4.1 & ASTM D6797-07(2015))

Preconditioning:	
Temperature:	<b>(20±2)</b> ℃
Relative Humidity:	(65±5)%
Period:	24 Hours

Sample	Specimen	Results	Requirement	Pass/Fail
1 2 3 4		557.0 N	Min. 178 N	Pass
		505.5 N	Min. 178 N	Pass
		518.5 N	Min. 178 N	Pass
		559.5 N	Min. 178 N	Pass
	5	568.0 N	Min. 178 N	Pass
	Average	542.0 N	Min. 178 N	Pass

Remark: This Test Was Conducted At Room 801/901, No. 8, East BaoYing Road, Huangpu District, Guangzhou. This Test In The Report Is Not Included In The CNAS Accreditation Schedule For Our Laboratory.

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# Intertek

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Issued To:

## **Certificate of Test**

Our Reference No.: GZHT9106516202

Certificate Issue Date: Oct 18, 2021

DEYING INT'L PLAZA,#222 CHANGHONG ROAD. YUHUATAI DISTRICT, NANJING 210012 ANNE WANG

OFFICE

Attn: Description: One (1) piece of submitted sample said to be Silver CS 1303-2 Reflective Tape.

We Hereby Declare That The Sample Described Above Has Been Tested By Intertek Testing Services Shenzhen Ltd. Guangzhou Branch And Meets The Requirements Of The Following Selected Tests Of ANSI/ISEA 107-2020.

Retroreflective Performance Prior to Test Exposure Retroreflective Performance Prior to Test Exposure Retroreflection After Abrasion Retroreflection After Flexing Retroreflection After Folding At Cold Temperatures Retroreflection After Temperature Variation Retroreflection After Washing Retroreflection (Wet Performance)

**TRC NANJING REPRESENTATIVE** 

ROOM 1809.#3 BUILDING

The test results are given in our report No.: GZHT91065162 Dated: Oct 18 Dated: Oct 18, 2021

Note:

- This Declaration Applies To The Particular Sample Tested And To The Specific Tests Carried Out As Dated And Detailed In The Report(S) Referenced Above. This Certificate Is Valid Only For The Applicant's Selected Test Items And Must Not Be Used Without 1
- 2 The Attached Test Report.
- This Certificate Must Not Be Confused Neither With The EU Type Examination Certificate Released 3 By Nofified Body Nor With The Conformaity Declaration Released By Manufacturer.

Authorized By: For Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Guiliang Dong Senior Lab Manager

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Intertek Testing Services Shenzhen Ltd. Guangzhou Branch 深圳天祥质量技术服务有限公司广州分公司 ネガリスキーの単式: 木取 多利用に入 判力 欠可 Room 02, 1-8/F. & Room 01, F101/E201/E301/E401/E501/E601/E701/E801, No.7-2, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, Guangdong, China 广州经济技术开发区科学研究版路 7 5 之二第1-8 長 02 房、01 房 101、 E201、E301、E401、E501、E601、E701、E801 Tel: +86 208213 9001 Pax: +86 20 82089999 Postcode: 510663 (6)



Total Quality. Assured. TEST REPORT



Applicant: TRC NANJING REPRESENTATIVE OFFICE ROOM 1809,#3 BUILDING, DEYING INT'L PLAZA,#222 CHANGHONG ROAD, Date: Oct 18, 2021

YUHUATAI DISTRICT, NANJING 210012

Attn: ANNE WANG

Sample Description: One (1) piece of submitted	d sample s	aid to be Silver CS 1303-2 Reflective Tape.
Standard		ANSI/ISEA 107-2020
Buyer	:	Tingley Rubber Corporation
Ref. No.	:	CS 1303-2 Reflective Tape, #SF210610CSR
Goods Exported to	:	U.S.A.
Date Received/Date Test S	Started	Sep. 16, 2021
Date Final Information Co	nfirmed/	/Oct. 15, 2021
Date Payment Received:		

Test Result Please Refer To Attached Page(S).

Should you have any query on this report, you may contact at <u>gzfootwear@intertek.com</u>

Authorized By: For Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Guiliang Dong Senior Lab Manager

JO / lydiayang



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Tests Conducted (As Requested By The Applicant)

TEST REPORT



## 1 Retroreflective Performance Prior to Test Exposure (ANSI/ISEA 107-2020, 9.1 & 10.3 & ASTM E809-08(2013))

Sample	Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2=0$ )	Coeffici Retroref cd/(lx	lection	Requirement	Pass/Fail
-	0.20° [12']	5°	392	392	Min. 330/248 cd/(lx·m <sup>2</sup> ) (*)	Pass
		20°	394	390	Min. 290/218 cd/(lx·m <sup>2</sup> ) (*)	Pass
		30°	395	377	Min. 180/135 cd/(lx·m <sup>2</sup> ) (*)	Pass
		40°	357	340	Min. 65/47 cd/(lx·m <sup>2</sup> ) (*)	Pass
	0.33°[20′]	5°	269	269	Min. 250/188 cd/(lx·m <sup>2</sup> ) (*)	Pass
		20°	276	272	Min. 200/150 cd/(lx·m <sup>2</sup> ) (*)	Pass
		30°	277	263	Min. 170/128 cd/(lx·m <sup>2</sup> ) (*)	Pass
		40°	254	247	Min. 60/45 cd/(lx·m <sup>2</sup> ) (*)	Pass
	1.0°	5°	44.2	43.6	Min. 25/18.8 cd/(lx·m <sup>2</sup> ) (*)	Pass
		20°	42.7	41.6	Min. 15/11.3 cd/(lx·m <sup>2</sup> ) (*)	Pass
		30°	40.4	38.8	Min. 12/9 cd/(lx·m <sup>2</sup> ) (*)	Pass
		40°	35.6	33.0	Min. 10/7.5 cd/(lx·m <sup>2</sup> ) (*)	Pass
	1.5° [1° 30′]	5°	19.3	19.3	Min. 10/7.5 cd/(lx·m <sup>2</sup> ) (*)	Pass
		20°	18.7	18.5	Min. 7/5.25 cd/(lx·m <sup>2</sup> ) (*)	Pass
		30°	18.1	17.4	Min. 5/3.75 cd/(lx·m <sup>2</sup> ) (*)	Pass
		40°	15.6	15.5	Min. 4/3 cd/(lx·m <sup>2</sup> ) (*)	Pass

\*= Retroreflective Material Shall Comply With The Minimum Requirements For The Coefficient Of Retroreflection At The One Of The Two Rotation Angles, And Shall Be Not Less Than 75% Of The Values At The Other Rotation Angle.

Note: Take Measurements At  $\epsilon 1=0^{\circ}$  And  $\epsilon 2=90^{\circ}$ . Maximum Value Is Recorded On Left Side Of The Result Column And The Other Value On Right Side Of Test Result Column.

/ lydiayang

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## 2 Retroreflection After Abrasion (ANSI/ISEA 107-2020, 9.2 & 10.4.1)

l est Exposure	Test Method
Abrasion	ISO 12947-2:2016, Pressure: 9 kPa, 5,000 Cycles

Sample		x-Direction (Horizontal: $\varepsilon = 0^{\circ}$ )					
	Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	<u>Requirement</u>	<u>Pass / Fail</u>		
-	0.20° [12′]	5°	394 cd/(lx⋅m²)	Min. 100 cd/(lx·m <sup>2</sup> )	Pass		

Sample		y-Direction (Vertical: $\varepsilon = 90^{\circ}$ )						
	Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	<u>Requirement</u>	<u>Pass / Fail</u>			
-	0.20° [12′]	5°	388 cd/(lx⋅m²)	Min. 75 cd/(lx·m <sup>2</sup> )	Pass			

## 3 Retroreflection After Flexing (ANSI/ISEA 107-2020, 9.2 & 10.4.2)

Test Exposure	Test Method
Flexing	ISO 7854:1995, Method A, 7,500 Cycles

Sample		x-Direction (Horizontal: ε=0°)						
	Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	<u>Requirement</u>	<u>Pass / Fail</u>			
-	0.20° [12′]	5°	377 cd/(lx·m <sup>2</sup> )	Min. 100 cd/(lx⋅m <sup>2</sup> )	Pass			

Sample		y-Direction (Vertical: $\varepsilon$ =90°)						
	Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	<u>Requirement</u>	<u>Pass / Fail</u>			
-	0.20° [12′]	5°	370 cd/(lx⋅m²)	Min. 75 cd/(lx⋅m²)	Pass			

## 4 Retroreflection After Folding At Cold Temperatures (ANSI/ISEA 107-2020, 9.2 & 10.4.3)

Test Exposure	Test Method
Folding At Cold Temperatures	ISO 4675:2017, Exposure At (-20 $\pm$ 1)°C For 4 Hours

Sample		x-Direction (Horizontal: $\varepsilon = 0^{\circ}$ )						
	Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	<u>Requirement</u>	<u>Pass / Fail</u>			
-	0.20° [12′]	5°	380 cd/(lx⋅m²)	Min. 100 cd/(lx⋅m²)	Pass			

	Sample		y	y-Direction (Vertical: ε=90°	)	
		Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	Requirement	<u>Pass / Fail</u>
Ĺ	-	0.20° [12']	5°	380 cd/(lx·m <sup>2</sup> )	Min. 75 cd/( $lx \cdot m^2$ )	Pass

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<u>TEST REPORT</u> Tests Conducted (As Requested By The Applicant)

## 5 Retroreflection After Temperature Variation (ANSI/ISEA 107-2020, 9.2 & 10.4.4)

Test Exposure	Test Method
Temperature Variation	<ul> <li>a) For 12 H At 50±2°C; Immediately Followed By</li> <li>b) 20 H At -30±2°C; Immediately Followed By</li> <li>c) For At Least 2 H At 20+2°C And CE LE % Deleting Humidity</li> </ul>
	c) For At Least 2 H At 20±2 <sup>°</sup> C And 65±5 % Relative Humidity

Sample	x-Direction (Horizontal: $\epsilon$ =0°)					
	Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	<u>Requirement</u>	<u>Pass / Fail</u>	
-	0.20° [12′]	5°	386 cd/(lx⋅m²)	Min. 100 cd/(lx·m²)	Pass	

Sample	y-Direction (Vertical: $\epsilon = 90^{\circ}$ )					
	Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	Requirement	<u>Pass / Fail</u>	
-	0.20° [12′]	<b>5</b> °	386 cd/(lx⋅m²)	Min. 75 cd/(lx·m²)	Pass	

## 6 Retroreflection After Washing (ANSI/ISEA 107-2020, 9.2 & 10.4.5.2 (Washing))

Wash Condition:	
Washing Standard:	ISO 6330:2012
Machine:	Туре А
Reagent:	Reference Detergent 3
Washing Procedure:	6N
Bleaching Procedure:	-
Drying Procedure:	After Each Wash Cycle The Samples Were Dried At 50±5℃.
Ironing Procedure:	-
Professional Textile Care Procedure:	-
Number Of Cycles:	25

Sample	x-Direction (Horizontal: $\epsilon = 0^{\circ}$ )					
	Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	<u>Requirement</u>	<u>Pass / Fail</u>	
-	0.20° [12′]	5°	194 cd/(lx·m <sup>2</sup> )	Min. 100 cd/(lx·m <sup>2</sup> )	Pass	

Γ	Sample	y-Direction (Vertical: $\epsilon = 90^{\circ}$ )					
		Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	<u>Requirement</u>	<u>Pass / Fail</u>	
	-	0.20° [12′]	5°	193 cd/(lx·m <sup>2</sup> )	Min. 75 cd/(lx·m <sup>2</sup> )	Pass	

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## 7 Retroreflection (Wet Performance) (ANSI/ISEA 107-2020, 9.2 & Appendix B)

Test Exposure	Test Method
Retroreflective Wet Performance	ANSI/ISEA 107-2020, Appendix B

Sample	x-Direction (Horizontal: $\epsilon=0^{\circ}$ )					
	Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	<u>Requirement</u>	<u>Pass / Fail</u>	
-	0.20° [12′]	<b>5</b> °	212 cd/(lx·m <sup>2</sup> )	Min. 100 cd/(lx⋅m <sup>2</sup> )	Pass	

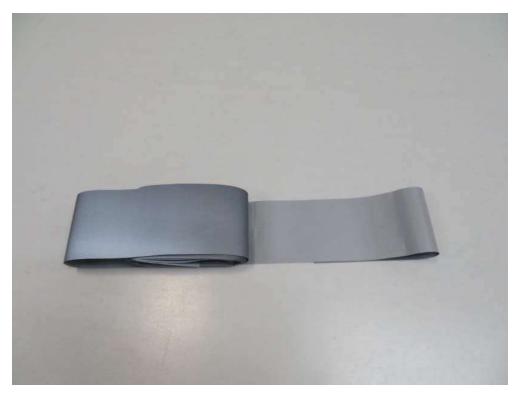
Sample	y-Direction (Vertical: $\epsilon$ =90°)					
	Observation Angle	Entrance Angle $\beta_1$ ( $\beta_2 = 0^\circ$ )	Coefficient Of Retroreflection	<u>Requirement</u>	<u>Pass / Fail</u>	
-	0.20° [12′]	<b>5</b> °	160 cd/(lx·m <sup>2</sup> )	Min. 75 cd/(lx·m <sup>2</sup> )	Pass	

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