# E3. Declaration of Conformity

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

Certificate No. P27122-2020	
Supplier name and address: Tingley Ru	bber Corporation
	ashington Ave., Suite 403
Piscatawa	y, NJ 08854
•	per, part number or other information as applicable):
Icon LTE Pants, Fluorescent Yellow-Gre	een
Model Number: P27122	
compliant high-visibility safety item for Pedocuments referenced under this certification.	ct meets all set requirements as stated in ANSI/ISEA 107-2020 as a erformance Class_E; All relevant materials have been tested with ate number. This item meets all design requirements and has been ble reflective material and background materials for the smallest size
1. VISIBLE BACKGROUND MATERIA	L:
<ul> <li>Amount of visible background mate</li> </ul>	erial (smallest size offered): >0.30m² (465 in.²)
	towards the amount VICIDI E DACKOROLING MATERIAL IS 1. 1.
Use separate sheet for addition materials.	towards the amount <b>VISIBLE BACKGROUND MATERIAL</b> listed above.
Material 1 Identification	Matarial Tyras Oldrittad V Wassan O Others
Test Lab: Intertek	Material Type: □Knitted X Woven □ Other:  ————
Report #: GZHT91082765	Material Content (such as Polyester, Modacrylic, and others): Polyurethane on 75 denier Polyester
Date: 12/21/2021	Weight: 3.7 oz Color: Fl. Yellow-Green
Description: Breathable interior coated	Polyurethane on 75D ripstop Polyester with exterior DWR coating
Material 2 Identification	
Test Lab:	Material Type: □Knitted □ Woven □ Other: ————
Report #:	Material Content (such as Polyester, Modacrylic, and others):
Date:	Weight: Color:
Description:	
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 MAT	<b>∃RIAL</b>
۰ ۵	mount of visible retroreflective material	(smallest size offered) 0.07m² (109 in.²)
Ρle	ease list each type of material that contr	ibutes towards VISIBLE RETROREFLECTIVE MATERIAL listed above
Ma	aterial 1 Identification	
	Test Lab: Intertek	
	Report #: GZHT91069017	
	Date: 11/11/2021	Style #: VB211A
	Description: 50mm wide sew on silver I	eflective trim
N/-	stavial 2 Idantification	
IVI	aterial 2 Identification	
-	Test Lab:	
	Report #:	
	Date:	Style #:
	Description:	
*U	se separate sheet for additional materia	ıls
3.	OVERALL LUMINANCE	
	Check here if test report for option	al Overall Luminance testing is attached.
Th	e undersigned hereby warrants that he/	she is authorized to legally bind the company identified above.
Się	gned: <u>Mghan Bows</u>	Title: Product Manager
Dri	int Name: Meghan Bowser	Date: 8/17/22



# **Certificate of Test**

**Issued To:** TRC NANJING REPRESENTATIVE Our Reference No.: GZHT9108276502

**OFFICE** 

ROOM 1809,#3 BUILDING, Certificate Issue Date: Dec 21, 2021

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

Attn: ANNE WANG

One (1) piece of submitted sample said to be Hi-Vis YG PU on 75D Rip Stop Polyester, #ZY202109053. Description:

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

Water Repellency Protection

Waterproof Protection

Color Fastness To Laundry Of Background Material

Dimension Change Of Background Material

Tear Resistance

Water Vapor Permeability

The test results are given in our report

No.: GZHT91082765 Dated: Dec 21, 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.
- 2 This Certificate Is Valid Only For The Applicant's Selected Test Items And Must Not Be Used Without The Attached Test Report.
- This Certificate Must Not Be Confused Neither With The EU Type Examination Certificate Released 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

(6)



Applicant:



Number: GZHT91082765

Dec 21, 2021

Date:

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 said to be Hi-Vis YG PU on 75D Rip Stop Polyester, #ZY202109053.

Standard ANSI/ISEA 107-2020

Buyer **Tingley Rubber Corporation** 

Hi-Vis YG PU on 75D Rip Stop Polyester, #ZY202109053 Ref. No.

Goods Exported to U.S.A

Date Received/Date Test Started Dec. 02, 2021

Date Final Information Confirmed/ --/--

Date Payment Received:

Test Result Please Refer To Attached Page(S).

Should you have any query on this report, you may contact at <a href="mailto:qzfootwear@intertek.com">qzfootwear@intertek.com</a>

Authorized By:

For Intertek Testing Services Shenzhen Ltd.

Guangzhou Branch

Guiliang Dong Senior Lab Manager

Page 1 Of 10

BF / lydiayang





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-co	Pre-condition Chromaticity Coor		ty Coordinates Lumin		<u>Requirement</u>	Pass/Fail	
			ε	Х	у	Y (%)		
-	Fluorescent	As	0°	0.3818	0.5338	104	-	-
	Yellow-	Received (#1)	90°	0.3819	0.5333	104	-	-
	Green		Mean	0.382	0.534	104	*	Pass
		After Xenon	0°	0.3743	0.5143	103	-	-
		Test (# & #1)	90°	0.3745	0.5140	103	-	-
			Mean	0.374	0.514	103	*	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	Chromaticity Coordinates		Total Luminance Factor	Applicant's Requirement	Pass/Fail	
			3	Х	У	Y (%)		
-	Fluorescent	After Washing	0°	0.3810	0.5339	107	-	-
	Yellow-	(#1 & #2)	90°	0.3811	0.5341	106	-	-
	Green		Mean	0.381	0.534	106	*	Pass
Note:	Note: The Specimen Is Backed By A Black Underlay With A Reflectance Of Less Than 0.04.							

/ lydiayang

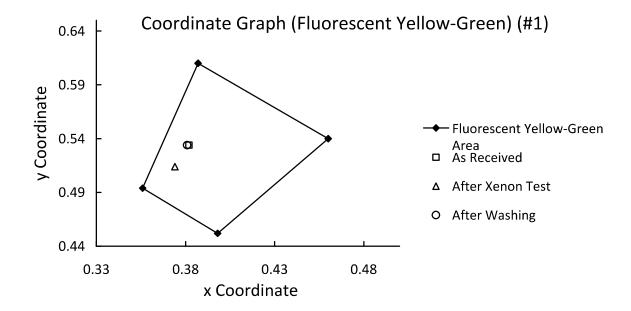
Page 2 Of 10





**TEST REPORT** Tests Conducted (As Requested By The Applicant)

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



### Remark: \* =

Color	Chromaticity	Coordinates	Minimum Total Luminance Factor				
	X	У	Y (%)				
Fluorescent Yellow-Green	0.387 0.356 0.398 0.460	0.610 0.494 0.452 0.540	70				
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 $^2$ @420nm). Two Layers Of The Same Material ISO 6330:2012, Wash Condition:

iso osso.zotz, wasii colididoli.	
Washing Standard:	ISO 6330:2012
Machine:	Type A
Reagent:	Reference Detergent 3
Washing Procedure:	4 N
Bleaching Procedure:	-
Drying Procedure:	Line Drying
Ironing Procedure:	-
Professional Textile Care Procedure:	-
Number Of Cycles:	25

/ lydiayang

Page 3 Of 10





Number:

GZHT91082765

**TEST REPORT** 

Tests Conducted (As Requested By The Applicant)

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

Preconditioning:

Temperature: (20±2)°C Relative Humidity:  $(65\pm5)\%$ 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  $(38 \pm 1)$  °C Oven temperature:  $6 h \pm 5 min$ Test Period:

Sample			Results	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 4.5		
		-Polyester	Grade 4.5	Min. Grade 3.0	Pass
		-Acrylic	Grade 4.5		
		-Wool	Grade 4.5		





GZHT91082765 Number:

Page 5 Of 10

**TEST REPORT** 

Tests Conducted (As Requested By The Applicant)

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

Test Condition:

Pressure: 4.5 kg  $(38 \pm 1) \,^{\circ}\text{C}$ Oven Temperature: Test Period: 18 h

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

5 Water Repellency Protection (Spray Test) (ANSI/ISEA 107-2020, 8.5.1 & AATCC 22-2017)

Specimen Conditioning:

Temperature: **(20**±2**)**℃ Relative Humidity:  $(65\pm5)\%$ Period: 24 Hours

Test Condition:

Water Temperature: **(27±1)**℃ Water Volume: 250 ml

Spray Time 25 - 30 Seconds

Sample	Pre-treatment	Results	Requirement	Pass/Fail
-	As Received	100	Min. 90	Pass
	After 5 Laundry Cycles (*)	100	Min. 70	Pass

Remark: \* = AATCC 135-2018

/ lydiayang

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

深圳天祥质量技术服务确定公司广州分公司
Room 02, 1-8/F. & Room 01, F.101/E201/E301/E403/E501/E601/E701/E801,
No.7-2, Caipin Road, Guangzhou Seence City, GFTDB, Guangzhou, Guangdong, China 广州经济技术开发区科学规划领路 7 是《二第1》是 02 房、01 房 101、 E201、E301、A61、E501、E605、产到、E801
Tel: +86 208213 9001 Pax: 增长20 82189989 Postcode: 510663





Total Quality. Assured. **TEST REPORT** 

Tests Conducted (As Requested By The Applicant)

6 Waterproof Protection (Hydrostatic Pressure Test) (ANSI/ISEA 107-2020, 8.5.3 & AATCC 127-2017)

Specimen Conditioning:

Temperature: (20±2)°C Relative Humidity:  $(65\pm5)\%$ 

Period: 24 Hours

Test Condition:

Equipment Type: Hydrostatic Head Tester

Water Temperature: **(21±2)**℃ Gradient 60 mbar/min

Sample	Pre-treatment	Specimen	Results	<u>Requirement</u>	Pass/Fail
-		1	> 500 cm	Min. 200 cm	Pass
	As Received	2	> 500 cm	Min. 200 cm	Pass
		3	> 500 cm	Min. 200 cm	Pass
	After 5 Laundry Cycles(*)	1	> 500 cm	Min. 200 cm	Pass
		2	> 500 cm	Min. 200 cm	Pass
		3	> 500 cm	Min. 200 cm	Pass

Sample	Pre-treatment	Specimen	Results	Applicant's Requirement	Pass/Fail
-	After 25 Laundry Cycles(*)	1	> 500 cm	Min. 200 cm	Pass
		2	> 500 cm	Min. 200 cm	Pass
		3	> 500 cm	Min. 200 cm	Pass

Remark: \* = AATCC 135-2018





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

Test Condition:

Test Method: 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 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 4.5		

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

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

Test Condition:

AATCC 135-2012 (3)(III)(A)(iii) Standard Code:

Cleaning Cycles:

Sample		Results		<u>Pass / Fail</u>
	Length	-0.8%	*	Pass
	Width	-0.4%	*	Pass

Remark: \* = Material Type Length

Knit Fabrics And All Other Materials 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.

/ lydiayang





Total Quality. Assured. **TEST REPORT** 

Tests Conducted (As Requested By The Applicant)

9 Tear Resistance Of Woven Materials (Uncoated, Coated Or Laminate) (ANSI/ISEA 107-2020, 8.4.2 & ASTM D1424-09(2019))

Preconditioning:

Temperature: (20±2)°C Relative Humidity:  $(65\pm5)\%$ Period: 24 hours

Sample	Specimen	Machine Direction	Requirement	Pass/Fail
	1	28.6 N	-	-
	2	28.3 N	-	-
	3	27.4 N	-	-
	4	31.7 N	-	-
	5	28.1 N	-	-
	Average	28.8 N	Min. 13 N	Pass
	Specimen	Cross-Machine Direction	Requirement	Pass/Fail
	1	26.6 N	-	-
	2	29.3 N	-	-
	3	29.9 N	-	-
	4	30.4 N	-	-
	5	29.4 N	-	-
	Average	29.1 N	Min. 13 N	Pass

Remark: N = Newton

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





10 Water Vapor Permeability For Background Materials Classified As Breathable (ANSI/ISEA 107-2020, 8.6 & ASTM E96-16, Procedure BW – Inverted For Hydrophilic)

Test Condition:

Temperature: 23℃ Relative Humidity: 50%

Sample	Specimen	Results (WVT)	<u>Requirement</u>	Pass/Fail
	1	3666.5 g/m <sup>2</sup> /24 Hours	-	-
	2	3929.4 g/m <sup>2</sup> /24 Hours	-	-
	3	3749.6 g/m <sup>2</sup> /24 Hours	-	-
	Average	3781.8 g/m <sup>2</sup> /24 Hours	*	Pass

Remark:  $* = Min. 3600 \text{ g/m}^2/24 \text{ Hours For Procedure BW}$ 

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







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.



# **Certificate of Test**

TRC NANJING REPRESENTATIVE OFFICE Issued To: Our Reference No.: GZHT9106901702

> ROOM 1809,#3 BUILDING, Certificate Issue Date: Nov 11, 2021

DEYING INT'L PLAZA,#222 CHANGHONG

ROAD.

YUHUATAI DISTRICT, NANJING 210012

Attn: ANNE WANG

Description: One (1) piece of submitted sample said to be Silver VB211A WP 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 Retroreflection After Abrasion Retroreflection After Flexing Retroreflection After Folding At Cold Temperatures Retroreflection After Temperature Variation

Retroreflection After Washing Retroreflection (Wet Performance)

The test results are given in our report

No.: GZHT91069017 Dated: Nov 11, 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 2 The Attached Test Report.
- This Certificate Must Not Be Confused Neither With The EU Type Examination Certificate Released By Nofified Body Nor With The Conformalty Declaration Released By Manufacturer.

Authorized By:

For Intertek Testing Services Shenzhen Ltd.

Guangzhou Branch

Guiliang Dong Senior Lab Manager





Nov 11, 2021

Date:

Applicant: 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 said to be Silver VB211A WP Reflective Tape.

Standard ANSI/ISEA 107-2020

Buyer **Tingley Rubber Corporation** 

VB211A WP Reflective Tape, #20210820-3 Ref.

Goods Exported to U.S.A.

Date Received/Date Test Started Oct. 09, 2021 Nov. 11, 2021/--Date Final Information Confirmed/

Date Payment Received:

Test Result Please Refer To Attached Page(S).

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

Authorized By:

For Intertek Testing Services Shenzhen Ltd.

Guangzhou Branch

Guiliang Dong Senior Lab Manager

Page 1 Of 6

wx / lydiayang





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	Tection	<u>Requirement</u>	Pass/Fail
-	0.20° [12′]	5°	504	500	Min. 330/248 cd/( $lx \cdot m^2$ ) (*)	Pass
		20°	475	468	Min. 290/218 cd/(lx·m²) (*)	Pass
		30°	398	391	Min. 180/135 cd/( $lx \cdot m^2$ ) (*)	Pass
		40°	232	216	Min. 65/47 cd/( $lx \cdot m^2$ ) (*)	Pass
	0.33° [20′]	5°	288	286	Min. 250/188 cd/(lx·m²) (*)	Pass
		20°	274	267	Min. 200/150 cd/(lx·m²) (*)	Pass
		30°	246	241	Min. 170/128 cd/(lx·m²) (*)	Pass
		40°	171	168	Min. 60/45 cd/(lx·m²) (*)	Pass
	1.0°	5°	82.5	80.7	Min. 25/18.8 cd/(lx·m²) (*)	Pass
		20°	83.9	83.6	Min. 15/11.3 cd/(lx·m <sup>2</sup> ) (*)	Pass
		30°	79.9	79.5	Min. 12/9 cd/(lx·m²) (*)	Pass
		40°	49.7	45.2	Min. 10/7.5 cd/(lx·m²) (*)	Pass
	1.5° [1° 30′]	5°	19.8	18.5	Min. 10/7.5 cd/(lx·m²) (*)	Pass
		20°	21.5	21.0	Min. 7/5.25 cd/(lx·m²) (*)	Pass
		30°	24.7	24.4	Min. 5/3.75 cd/(lx·m <sup>2</sup> ) (*)	Pass
		40°	22.7	22.4	Min. 4/3 cd/(lx·m²) (*)	Pass

<sup>\*=</sup> 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.





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

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

Sample	x-Direction (Horizontal: $\epsilon$ =0 $^{\circ}$ )				
	Observation Angle	Entrance Angle $\beta_1$ $(\beta_2 = 0^\circ)$	Coefficient Of Retroreflection	<u>Requirement</u>	Pass / Fail
-	0.20° [12′]	5°	471 cd/(lx·m <sup>2</sup> )	Min. 100 cd/(lx·m²)	Pass

Sample	y-Direction (Vertical: ε=90°)				
	Observation Angle	Entrance Angle $\beta_1$ $(\beta_2 = 0^\circ)$	Coefficient Of Retroreflection	<u>Requirement</u>	Pass / Fail
-	0.20° [12′]	5°	470 cd/(lx·m <sup>2</sup> )	Min. 75 cd/(lx·m <sup>2</sup> )	Pass

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: $\epsilon$ =0 $^{\circ}$ )				
	Observation Angle	Entrance Angle $\beta_1$ $(\beta_2 = 0^\circ)$	Coefficient Of Retroreflection	<u>Requirement</u>	Pass / Fail
-	0.20° [12′]	5°	474 cd/(lx·m <sup>2</sup> )	Min. 100 cd/(lx·m <sup>2</sup> )	Pass

Sample	y-Direction (Vertical: ε=90°)				
	Observation Angle	Entrance Angle $\beta_1$ $(\beta_2 = 0^\circ)$	Coefficient Of Retroreflection	<u>Requirement</u>	Pass / Fail
_	0.20° [12′]	5°	474 cd/(lx·m²)	Min. 75 cd/(lx·m <sup>2</sup> )	Pass

/ lydiayang





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 $(-20\pm1)^{\circ}$ C For 4 Hours

Sample	x-Direction (Horizontal: $\epsilon$ =0 $^{\circ}$ )						
	Observation Angle	Entrance Angle $\beta_1$ $(\beta_2 = 0^\circ)$	Coefficient Of Retroreflection	<u>Requirement</u>	Pass / Fail		
-	0.20° [12′]	5°	500 cd/(lx·m <sup>2</sup> )	Min. 100 cd/(lx·m <sup>2</sup> )	Pass		

Sample	y-Direction (Vertical: ε=90°)						
	Observation	Entrance Angle β <sub>1</sub>	Coefficient Of	Requirement	Pass / Fail		
	Angle	$(\beta_2 = 0^{\circ})$	Retroreflection	<u>Requirement</u>	1 033 / 1 011		
-	0.20° [12′]	5°	496 cd/(lx·m <sup>2</sup> )	Min. 75 cd/( $lx \cdot m^2$ )	Pass		

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

Test Exposure	Test Method
	a) For 12 H At 50±2℃; Immediately Followed By
Temperature Variation	b) 20 H At −30±2℃; Immediately Followed By
	c) For At Least 2 H At 20±2℃ And 65±5 % Relative Humidity

Sample	x-Direction (Horizontal: $\epsilon$ =0 $^{\circ}$ )						
	Observation Angle	Entrance Angle $\beta_1$ $(\beta_2 = 0^\circ)$	Coefficient Of Retroreflection	<u>Requirement</u>	Pass / Fail		
-	0.20° [12′]	5°	503 cd/(lx·m <sup>2</sup> )	Min. 100 cd/(lx·m²)	Pass		

Sample	y-Direction (Vertical: ε=90°)						
	Observation Angle	Entrance Angle $\beta_1$ $(\beta_2 = 0^\circ)$	Coefficient Of Retroreflection	<u>Requirement</u>	Pass / Fail		
-	0.20° [12′]	5°	499 cd/(lx·m²)	Min. 75 cd/(lx·m <sup>2</sup> )	Pass		

/ lydiayang





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

#### Wash Condition:

ISO 6330:2012
Type A
Reference Detergent 3
6N
-
After Each Wash Cycle Dried The Samples At 50±5℃.
-
-
25

Sample	x-Direction (Horizontal: $\varepsilon$ =0 $^{\circ}$ )						
	Observation Angle	Entrance Angle $\beta_1$ $(\beta_2 = 0^\circ)$	Coefficient Of Retroreflection	<u>Requirement</u>	Pass / Fail		
_	0.20° [12′]	5°	278 cd/(lx·m <sup>2</sup> )	Min. 100 cd/(lx·m <sup>2</sup> )	Pass		

Sample	y-Direction (Vertical: ε=90°)						
	Observation Angle	Entrance Angle $\beta_1$ $(\beta_2 = 0^\circ)$	Coefficient Of Retroreflection	<u>Requirement</u>	Pass / Fail		
-	0.20° [12′]	5°	270 cd/(lx·m <sup>2</sup> )	Min. 75 cd/(lx·m <sup>2</sup> )	Pass		

#### 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>	Pass / Fail		
-	0.20° [12′]	5°	358 cd/(lx·m <sup>2</sup> )	Min. 100 cd/(lx·m <sup>2</sup> )	Pass		

Sample	y-Direction (Vertical: ε=90°)						
	Observation Angle	Entrance Angle $\beta_1$ $(\beta_2 = 0^\circ)$	Coefficient Of Retroreflection	<u>Requirement</u>	Pass / Fail		
-	0.20° [12′]	5°	343 cd/(lx·m <sup>2</sup> )	Min. 75 cd/(lx·m <sup>2</sup> )	Pass		

/ lydiayang

Page 5 Of 6







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.