E3. Declaration of Conformity

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

Certificate No. J73022-2020
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): Phase 2 Jacket, Fluorescent Yellow-Green Model Number: J73022
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 2 ., Type R ; 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): >0.50m² (775 in.²)

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: ☐ Knitted ☒ Woven ☐ Other: _____
Report #: GZHT91074267	Material Content (such as Polyester, Modacrylic, and others): Woven Polyester with Acrylic Coating
Date: 12/09/2021	Weight: 4.0 oz Color: Fl. Yellow-Green
Description: Interior coated acrylic on 150D woven 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 MATERIAL

• Amount of visible retroreflective material (smallest size offered) 0.13m² (201 in.²)

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

Material 1 Identification

Test Lab: Intertek	
Report #: GZHT91065188	
Date: 10/18/2021	Style #: 1303-4
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: Meghan Bowser Title: Product Manager

Print Name: Meghan Bowser Date: 8/17/22

Certificate of Test

Issued To: **TRC NANJING REPRESENTATIVE** Our Reference No.: GZHT9107426702

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

Certificate Issue Date: Dec 09, 2021

Attn: ANNE WANG
Description: One (1) piece of submitted sample said to be Hi-Vis YG Acrylic on 150D Polyester.

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
Tear Resistance

The test results are given in our report
No.: GZHT91074267 Dated: Dec 09, 2021

Note:
1 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.
3 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

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
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TEST REPORT

Number: GZHT91074267

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

Date: Dec 09, 2021

Attn: ANNE WANG

Sample Description:
One (1) piece of submitted sample said to be Hi-Vis YG Acrylic on 150D Polyester.

Standard	:	ANSI/ISEA 107-2020
Buyer	:	Tingley Rubber Corporation
Ref. No.	:	Hi-Vis YG Acrylic on 150D Polyester,#ZY202104033
Goods Exported to	:	U.S.A
Date Received/Date Test Started		Oct. 28, 2021
Date Final Information Confirmed/ Date Payment Received:		--/Dec. 07, 2021

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

AY / lydiayang

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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	y	Y (%)		
-	Fluorescent Yellow-Green	As Received (#1)	0°	0.3809	0.5341	102	-	-
			90°	0.3811	0.5344	102	-	-
			Mean	0.381	0.534	102	*	Pass
		After Xenon Test (# & #1)	0°	0.3740	0.5211	99	-	-
			90°	0.3741	0.5212	98	-	-
			Mean	0.374	0.521	99	*	Pass
Note:	The Specimen Is Backed By A Black Underlay With A Reflectance Of Less Than 0.04.							

Sample	Color	Pre-Condition	Chromaticity Coordinates			Total Luminance Factor	Applicant's Requirement	Pass/Fail
			ε	x	y	Y (%)		
-	Fluorescent Yellow-Green	After Washing (#1 & #2)	0°	0.3804	0.5336	101	-	-
			90°	0.3807	0.5331	100	-	-
			Mean	0.381	0.533	100	*	Pass
Note:	The Specimen Is Backed By A Black Underlay With A Reflectance Of Less Than 0.04.							

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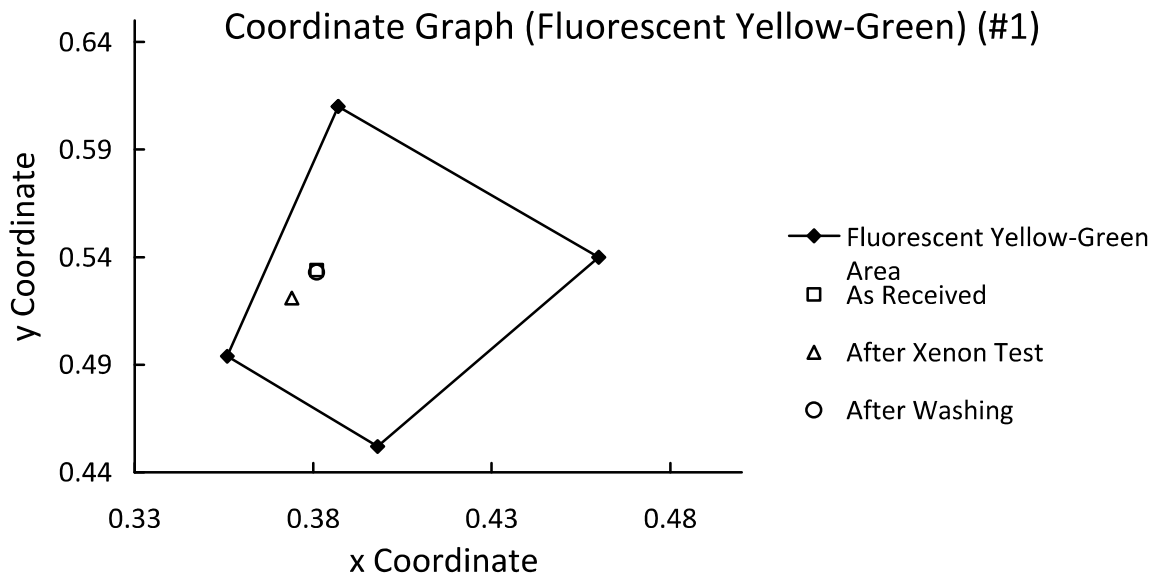
Color Performance Of Background And Combined-performance Materials (Cont)



Remark: * =

Color	Chromaticity Coordinates		Minimum Total Luminance Factor Y (%)
	x	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.			

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

= 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).
#1= Two Layers Of The Same Material
#2 = ISO 6330:2012, Wash Condition:

Washing Standard:	ISO 6330:2012
Machine:	Type A
Reagent:	Reference Detergent 3
Washing Procedure:	4 N
Bleaching Procedure:	-
Drying Procedure:	Line Dry
Ironing Procedure:	-
Professional Textile Care Procedure:	-
Number Of Cycles:	25

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

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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 4.5	Min. Grade 3.0	Pass
		-Cotton	Grade 4.5		
		-Nylon	Grade 4.0		
		-Polyester	Grade 4.5		
		-Acrylic	Grade 4.5		
		-Wool	Grade 4.5		

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

Test Condition:
Pressure: 4.5 kg
Oven Temperature: (38 ± 1) ℃
Test Period: 18 h

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

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5 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 3.5	Min. Grade 3.0	Pass
		-Cotton	Grade 4.5		
		-Nylon	Grade 3.5		
		-Polyester	Grade 4.0		
		-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.

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

Test Condition:
Standard Code: AATCC 135-2012 (3)(III)(A)(iii)
Cleaning Cycles: 5

Sample	Results		Requirement	Pass / Fail
	Length	-1.2%	*	Pass
	Width	-0.4%	*	Pass

Remark: * =

Material Type	Woven Fabric
Length	Not Exceed ±4%
Width	Not Exceed ±4%

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

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

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

Sample	Specimen	Machine Direction	Requirement	Pass/Fail
	1	25.5 N	-	-
	2	26.1 N	-	-
	3	23.7 N	-	-
	4	25.6 N	-	-
	5	25.6 N	-	-
	Average	25.3 N	Min. 13 N	Pass
	Specimen	Cross-Machine Direction	Requirement	Pass/Fail
	1	20.5 N	-	-
	2	20.1 N	-	-
	3	20.6 N	-	-
	4	20.4 N	-	-
	5	20.4 N	-	-
	Average	20.4 N	Min. 13 N	Pass

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

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
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End Of Report

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
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Certificate of Test

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

Our Reference No.: GZHT9106518802

Certificate Issue Date: Oct 18, 2021

Attn: ANNE WANG
Description: One (1) piece of submitted sample said to be Silver CS 1303-4 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.: GZHT91065188 Dated: Oct 18, 2021

Note:
1 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.
3 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

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
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TEST REPORT

Number: GZHT91065188

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

Date: Oct 18, 2021

Attn: ANNE WANG

Sample Description:
One (1) piece of submitted sample said to be Silver CS 1303-4 Reflective Tape.

Standard	:	ANSI/ISEA 107-2020
Buyer	:	Tingley Rubber Corporation
Ref. No.	:	CS 1303-4 Reflective Tape，#SF210610CSR
Goods Exported to	:	U.S.A
Date Received/Date Test Started		Sep. 16, 2021
Date Final Information Confirmed/ Date Payment Received:		--/Oct. 15, 2021

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

MR / lydiayang

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
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Tel: +86 208213 9001 Fax: +86 20 82089909 Postcode: 510663

TEST REPORT Number: GZHT91065188

Tests Conducted (As Requested By The Applicant)

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

Sample	Observation Angle	Entrance Angle β_1 (β_2=0)	Coefficient Of Retroreflection cd/(lx·m^2)		Requirement	Pass/Fail
-	0.20° [12′]	5°	490	488	Min. 330/248 cd/(lx·m^2) (*)	Pass
		20°	490	485	Min. 290/218 cd/(lx·m^2) (*)	Pass
		30°	483	475	Min. 180/135 cd/(lx·m^2) (*)	Pass
		40°	425	407	Min. 65/47 cd/(lx·m^2) (*)	Pass
	0.33° [20′]	5°	362	360	Min. 250/188 cd/(lx·m^2) (*)	Pass
		20°	366	363	Min. 200/150 cd/(lx·m^2) (*)	Pass
		30°	359	354	Min. 170/128 cd/(lx·m^2) (*)	Pass
		40°	326	312	Min. 60/45 cd/(lx·m^2) (*)	Pass
	1.0°	5°	34.1	34.1	Min. 25/18.8 cd/(lx·m^2) (*)	Pass
		20°	33.3	33.2	Min. 15/11.3 cd/(lx·m^2) (*)	Pass
		30°	33.6	32.6	Min. 12/9 cd/(lx·m^2) (*)	Pass
		40°	34.2	31.0	Min. 10/7.5 cd/(lx·m^2) (*)	Pass
	1.5° [1° 30′]	5°	25.4	24.9	Min. 10/7.5 cd/(lx·m^2) (*)	Pass
		20°	24.2	23.8	Min. 7/5.25 cd/(lx·m^2) (*)	Pass
		30°	22.9	22.8	Min. 5/3.75 cd/(lx·m^2) (*)	Pass
		40°	21.0	19.9	Min. 4/3 cd/(lx·m^2) (*)	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 ε1=0° And ε2=90° . Maximum Value Is Recorded On Left Side Of The Result Column And The Other Value On Right Side Of Test Result Column.

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Tel: +86 208213 9001 Fax: +86 20 82089909 Postcode: 510663

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: ε=0°)				
-	Observation Angle	Entrance Angle β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
	0.20° [12′]	5°	482 cd/(lx·m^2)	Min. 100 cd/(lx·m^2)	Pass

Sample	y-Direction (Vertical: ε=90°)				
-	Observation Angle	Entrance Angle β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
	0.20° [12′]	5°	481 cd/(lx·m^2)	Min. 75 cd/(lx·m^2)	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 β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
	0.20° [12′]	5°	424 cd/(lx·m^2)	Min. 100 cd/(lx·m^2)	Pass

Sample	y-Direction (Vertical: ε=90°)				
-	Observation Angle	Entrance Angle β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
	0.20° [12′]	5°	418 cd/(lx·m^2)	Min. 75 cd/(lx·m^2)	Pass

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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±1)°C For 4 Hours

Sample	x-Direction (Horizontal: ε=0°)				
	Observation Angle	Entrance Angle β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
-	0.20° [12′]	5°	461 cd/(lx·m^2)	Min. 100 cd/(lx·m^2)	Pass

Sample	y-Direction (Vertical: ε=90°)				
	Observation Angle	Entrance Angle β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
-	0.20° [12′]	5°	457 cd/(lx·m^2)	Min. 75 cd/(lx·m^2)	Pass

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

Test Exposure	Test Method
Temperature Variation	a) For 12 H At 50±2℃; Immediately Followed By 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: ε=0°)				
	Observation Angle	Entrance Angle β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
-	0.20° [12′]	5°	455 cd/(lx·m^2)	Min. 100 cd/(lx·m^2)	Pass

Sample	y-Direction (Vertical: ε=90°)				
	Observation Angle	Entrance Angle β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
-	0.20° [12′]	5°	452 cd/(lx·m^2)	Min. 75 cd/(lx·m^2)	Pass

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

Wash Condition:

Washing Standard:	ISO 6330:2012
Machine:	Type A
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: ε=0°)				
	Observation Angle	Entrance Angle β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
-	0.20° [12′]	5°	154 cd/(lx·m^2)	Min. 100 cd/(lx·m^2)	Pass

Sample	y-Direction (Vertical: ε=90°)				
	Observation Angle	Entrance Angle β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
-	0.20° [12′]	5°	125 cd/(lx·m^2)	Min. 75 cd/(lx·m^2)	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: ε=0°)				
	Observation Angle	Entrance Angle β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
-	0.20° [12′]	5°	290 cd/(lx·m^2)	Min. 100 cd/(lx·m^2)	Pass

Sample	y-Direction (Vertical: ε=90°)				
	Observation Angle	Entrance Angle β_1 (β_2 = 0°)	Coefficient Of Retroreflection	Requirement	Pass / Fail
-	0.20° [12′]	5°	276 cd/(lx·m^2)	Min. 75 cd/(lx·m^2)	Pass

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End Of Report

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