E3. Declaration of Conformity

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

| Certificate No. J23122-2020 | | | | | | | |
|--|---|--|--|--|--|--|--|
| Supplier name and address: Tingley Ru | bber Corporation | | | | | | |
| · · · | 1551 S. Washington Ave., Suite 403 | | | | | | |
| Piscataway, NJ 08854 | | | | | | | |
| Product information (name, model number, part number or other information as applicable): | | | | | | | |
| Vision Jacket, Fluorescent Yellow-Green | n | | | | | | |
| Model Number: J23122 | | | | | | | |
| compliant high-visibility safety item for Petested with documents referenced under | ct meets all set requirements as stated in ANSI/ISEA 107-2020 as a erformance Class 3. Type R.; All relevant materials have been this certificate number. This item meets all design requirements and unt of visible reflective material and background materials for the | | | | | | |
| 1. VISIBLE BACKGROUND MATERIA | L: | | | | | | |
| Amount of visible background mate | erial (smallest size offered): >0.80m² (1240 in.²) | | | | | | |
| Please list each material that contributes t Use separate sheet for addition materials. | towards the amount VISIBLE BACKGROUND MATERIAL listed above. | | | | | | |
| Material 1 Identification | | | | | | | |
| Test Lab: Intertek | Material Type: □Knitted X Woven □ Other: ——— | | | | | | |
| Report #: GZHT91069620 | Material Content (such as Polyester, Modacrylic, and others): Polyurethane on Woven Polyester | | | | | | |
| Date: 11/12/2021 | Weight: 3.7 oz Color: Fl. Yellow-Green | | | | | | |
| Description: Interior Coated Polyuretha | ane 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 MATI | ≣RIAL |
|-----|--|---|
| ۰ ۵ | Amount of visible retroreflective material | (smallest size offered) 0.20m² (310 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 r | eflective trim |
| Ma | aterial 2 Identification | |
| | Test Lab: | |
| | Report #: | |
| | Date: | Style #: |
| | Description: | |
| *U | se separate sheet for additional materia | uls |
| 3. | _ | 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: Mghan Bows | Title: Product Manager |
| Dri | _{int Name} ⋅ Meghan Bowser | Date: 8/17/22 |



Certificate of Test

TRC NANJING REPRESENTATIVE Issued To: Our Reference No.: GZHT9106962002

OFFICE

ROOM 1809,#3 BUILDING Certificate Issue Date: Nov 12, 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 Hi-Vis Yellow PU 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 Water Repellency Protection Water Vapor Permeability Water Vapor Permeability
Color Fastness To Laundry Of Background Material
Dimension Change Of Background Material Tear Resistance

The test results are given in our report No.: GZHT91069620 Dated: Nov 1 Dated: Nov 12, 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 Conformality Declaration Released By Manufacturer.

Authorized By:

For Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Guiliang Dong Senior Lab Manager





Date:



Nov 12, 2021

Number: GZHT91069620

Applicant: TRC NANJING REPRESENTATIVE OFFICE

ROOM 1809, #3 BUILDING,

DEYING INT'L PLAZA, #222 CHANGHONG ROAD,

YUHUATAI DISTRICT, NANJING 210012

ANNE WANG Attn:

Sample Description:

One (1) piece of submitted sample said to be Hi-Vis Yellow PU on 150D Polyester.

Standard ANSI/ISEA 107-2020

Tingley Rubber Corporation Buyer

Hi-Vis YG PU on 150D Polyester, #202105/LOT5 Ref. No.

Goods Exported to U.S.A

Date Received/Date Test Started Oct. 11, 2021 Date Final Information Confirmed/ Nov. 10, 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

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EC / lydiayang







Total Quality. Assured. **TEST REPORT**

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)

| Sample | Color | Pre-condition | · · · · · · · · · · · · · · · · · · · | | Total Luminance Factor | Requirement | Pass/Fail | |
|--------|-----------------|-------------------|---------------------------------------|-------------|------------------------------|----------------|-----------|------|
| | | | 3 | Х | у | Y (%) | | |
| | Fluorescent | As | 0° | 0.3836 | 0.5439 | 120 | - | - |
| - | Yellow Green | Received (#1) | 90° | 0.3836 | 0.5439 | 120 | - | - |
| | | | Mean | 0.384 | 0.544 | 120 | * | Pass |
| | | After Xenon | 0° | 0.3829 | 0.5362 | 118 | - | - |
| | | Test (# & #1) | 90° | 0.3829 | 0.5361 | 118 | - | - |
| | | | Mean | 0.383 | 0.536 | 118 | * | Pass |
| Note: | The Specimen | Is Backed By A Bl | ack 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 | |
|--------|--|---------------|--------------------------|--------|------------------------------|----------------------------|-----------|------|
| | | | ε | Х | у | Y (%) | | |
| | Fluorescent | After Washing | 0° | 0.3824 | 0.5432 | 118 | - | - |
| - | Yellow Green | (#1 & #2) | 90° | 0.3823 | 0.5430 | 118 | - | - |
| | | | Mean | 0.382 | 0.543 | 118 | * | Pass |
| Note: | Note: The Specimen Is Backed By A Black Underlay With A Reflectance Of Less Than 0.04. | | | | | | | |





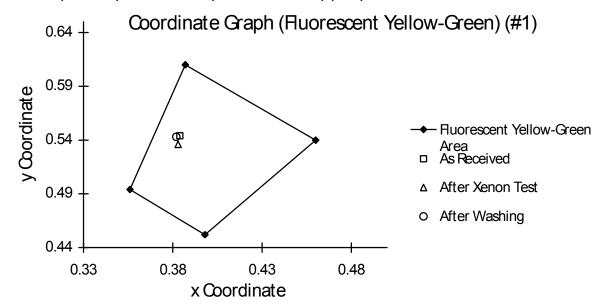
Number:



GZHT91069620

Total Quality. Assured. **TEST REPORT** 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) (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 | NOTE The Coordinate Of Sample Should Be Inside The Area Specified By The Table Above. | | | | | |

#1= #2 =

Xenon Test Based On AATCC 16.3-2014, Colorfastness To Light Xenon Arc. Expose The Materials To 40 AATCC Fading Units (170 KJ/m²@420nm).
Two Layers Of The Same Material ISO 6330:2012, Wash Condition:

Washing Standard:

| ISO 6330:2012 | Type A Reagent: Réference Detergent 3 Washing Procedure: Bleaching Procedure: Drying Procedure: Line Dry Ironing Procedure Professional Textile Care Procedure: Number Of Cycles 25

/ lydiayang

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深圳天祥质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/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范频路 7 号之二第1 8 号 02 房、01 房 101、E201、E301、A401、E501、E605、7501、E801

Tel: +86 208213 9001 Pax: +86 20 82089989 Postcode: 510663





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

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 |

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

Test Condition:

Load: 4.54 kg Oven temperature: (38 ± 1) °C Test Period: $6 h \pm 5 min$

| 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 | | |





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) °C 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)°C Relative Humidity: $(65\pm5)\%$ Period: 24 Hours

Test Condition:

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

25 - 30 Seconds Spray Time

| Sample | Pre-treatment | Results | <u>Requirement</u> | Pass/Fail |
|--------|----------------------------|---------|--------------------|-----------|
| | As Received | 100 | Min. 90 | Pass |
| _ | After 5 Laundry Cycles (*) | 80 | Min. 70 | Pass |

AATCC 135-2018 (Home Laundering)

/ lydiayang

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

Specimen Conditioning:

Temperature: (20±2)℃ 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 |
| | | 1 | > 500 cm | Min. 200 cm | Pass |
| | After 5 Laundry Cycles(*) | 2 | > 500 cm | Min. 200 cm | Pass |
| | | 3 | > 500 cm | Min. 200 cm | Pass |

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

Remark: * = AATCC 135-2018 (Home Laundering)





Water Vapor Permeability For Background Materials Classified As Breathable (ANSI/ISEA 107-2020, 8.6 & ASTM E96-16, Procedure B – Upright For Microporous)

Test Condition:

Temperature: 23℃ Relative Humidity: 50%

| Sample | Specimen | Results (WVT) | <u>Requirement</u> | Pass/Fail |
|--------|----------|----------------------------------|--------------------|-----------|
| | 1 | 921.6 g/m ² /24 Hours | - | - |
| | 2 | 896.6 g/m ² /24 Hours | - | - |
| | 3 | 909.1 g/m ² /24 Hours | - | - |
| | Average | 909.1 g/m ² /24 Hours | * | Pass |

Remark: $* = Min. 600 \text{ g/m}^2/24 \text{ Hours For Procedure B}$

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

Color Fastness To Laundry Of Background Material (ANSI/ISEA 107-2020, 8.2.3) 8

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.

/ lydiayang

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Number:

GZHT91069620

Total Quality. Assured. **TEST REPORT**

Tests Conducted (As Requested By The Applicant)

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:

| Sample | Results | | Requirement | Pass / Fail |
|--------|---------|-------|-------------|-------------|
| | Length | -0.8% | * | Pass |
| | Width | -0.4% | * | 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.

Tear Resistance Of Woven Materials (Uncoated, Coated Or Laminate) (ANSI/ISEA 107-2020, 8.4.2 & ASTM 10 D1424-09(2019))

Preconditioning:

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

| Sample | Specimen | Machine Direction | Requirement | Pass/Fail |
|--------|----------|-------------------------|--------------------|-----------|
| | 1 | 36.2 N | = | - |
| | 2 | 35.0 N | - | - |
| | 3 | 35.7 N | - | - |
| | 4 | 35.7 N | - | - |
| | 5 | 33.8 N | - | - |
| | Average | 35.3 N | Min. 13 N | Pass |
| | | | | |
| | Specimen | Cross-Machine Direction | <u>Requirement</u> | Pass/Fail |
| | 1 | 33.7 N | i | - |
| | 2 | 33.2 N | - | - |
| | 3 | 36.1 N | - | - |
| | 4 | 33.5 N | - | - |
| | 5 | 36.5 N | - | - |
| | Average | 34.6 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.

/ lydiayang







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

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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) | 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 ²) (*) | 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 ²) (*) | Pass |
| | | 40° | 22.7 | 22.4 | Min. 4/3 cd/(lx·m²) (*) | 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.





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 $(\beta_2 = 0^\circ)$ | Coefficient Of Retroreflection | <u>Requirement</u> | Pass / Fail |
| - | 0.20° [12′] | 5° | 471 cd/(lx·m ²) | Min. 100 cd/(lx·m²) | Pass |

| Sample | y-Direction (Vertical: ε=90°) | | | | |
|--------|-------------------------------|--|-----------------------------------|---------------------------------|-------------|
| | Observation Angle | Entrance Angle β_1 $(\beta_2 = 0^\circ)$ | Coefficient Of Retroreflection | <u>Requirement</u> | Pass / Fail |
| - | 0.20° [12′] | 5° | 470 cd/(lx·m ²) | Min. 75 cd/(lx·m ²) | 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: ϵ =0 $^{\circ}$) | | | | |
|--------|---|--|-----------------------------------|----------------------------------|-------------|
| | Observation Angle | Entrance Angle β_1 $(\beta_2 = 0^\circ)$ | Coefficient Of Retroreflection | <u>Requirement</u> | Pass / Fail |
| - | 0.20° [12′] | 5° | 474 cd/(lx·m²) | Min. 100 cd/(lx·m ²) | Pass |

| Sample | y-Direction (Vertical: ε=90°) | | | | |
|--------|-------------------------------|--|-----------------------------------|---------------------------------|-------------|
| | Observation Angle | Entrance Angle β_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 ²) | 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: ε=0°) | | | | | | |
|--------|--------------------------------|--|-----------------------------------|----------------------------------|-------------|--|--|
| | Observation Angle | Entrance Angle β_1 $(\beta_2 = 0^\circ)$ | Coefficient Of Retroreflection | <u>Requirement</u> | Pass / Fail | | |
| - | 0.20° [12′] | 5° | 500 cd/(lx·m ²) | Min. 100 cd/(lx·m ²) | Pass | | |

| Sample | y-Direction (Vertical: ε=90°) | | | | | | |
|--------|-------------------------------|-------------------------------|-----------------------------|-------------------------------|---------------|--|--|
| | Observation | Entrance Angle β ₁ | 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 ²) | 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: ϵ =0 $^{\circ}$) | | | | | | |
|--------|---|--|-----------------------------------|---------------------|-------------|--|--|
| | Observation Angle | Entrance Angle β_1 $(\beta_2 = 0^\circ)$ | Coefficient Of Retroreflection | <u>Requirement</u> | Pass / Fail | | |
| - | 0.20° [12′] | 5° | 503 cd/(lx·m ²) | Min. 100 cd/(lx·m²) | Pass | | |

| Sample | y-Direction (Vertical: ϵ =90 $^{\circ}$) | | | | | | |
|--------|--|--|-----------------------------------|---------------------------------|-------------|--|--|
| | Observation Angle | Entrance Angle β_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 ²) | 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: ε =0 $^{\circ}$) | | | | | | |
|--------|--|--|-----------------------------------|----------------------------------|-------------|--|--|
| | Observation Angle | Entrance Angle β_1 $(\beta_2 = 0^\circ)$ | Coefficient Of Retroreflection | <u>Requirement</u> | Pass / Fail | | |
| _ | 0.20° [12′] | 5° | 278 cd/(lx·m ²) | Min. 100 cd/(lx·m ²) | Pass | | |

| Sample | y-Direction (Vertical: ε=90°) | | | | | | |
|--------|-------------------------------|--|-----------------------------------|---------------------------------|-------------|--|--|
| | Observation Angle | Entrance Angle β_1 $(\beta_2 = 0^\circ)$ | Coefficient Of Retroreflection | <u>Requirement</u> | Pass / Fail | | |
| - | 0.20° [12′] | 5° | 270 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 $^{\circ}$) | | | | | | |
|--------|---|--|-----------------------------------|----------------------------------|-------------|--|--|
| | Observation Angle | Entrance Angle β_1 $(\beta_2 = 0^\circ)$ | Coefficient Of Retroreflection | <u>Requirement</u> | Pass / Fail | | |
| - | 0.20° [12′] | 5° | 358 cd/(lx·m ²) | Min. 100 cd/(lx·m ²) | Pass | | |

| Sample | y-Direction (Vertical: ε=90°) | | | | | | |
|--------|-------------------------------|--|-----------------------------------|---------------------------------|-------------|--|--|
| | Observation Angle | Entrance Angle β_1 $(\beta_2 = 0^\circ)$ | Coefficient Of Retroreflection | <u>Requirement</u> | Pass / Fail | | |
| - | 0.20° [12′] | 5° | 343 cd/(lx·m ²) | Min. 75 cd/(lx·m ²) | Pass | | |

/ lydiayang

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