

Quality Assurance & Compliance Testing Utilizing Textile & Related Technologies

19 West 36 Street, Tenth Floor New York, NY 10018 tel: 212 947 8391 fax: 212 947 8719

www.vartest.com

Third Party Certificate of Test (ANSI/ISEA 107-2020) COMBINED PERFORMANCE MATERIAL COMPLIANCE

Submitted by: La Casa Del Reflectivo S.A.S Name: Fluorescent Lime-Yellow Reflective Tape Style #: PVC-HW1006050-FLY Color Fl. Yellow-Green

Date: April 27, 2023

Test Report #: VCANBU.A102422A3

The submitted combined performance trim **MEETS** all performance requirements of retroreflective material PRIOR to test exposure per ANSI/ISEA 107-2020.

The submitted combined performance trim **MEETS** all performance requirements of retroreflective material AFTER test exposure per ANSI/ISEA 107-2020.

All of the above tests and evaluations were performed in accordance with ISO/IEC 17025 Quality Systems.

Certifications of background and other garment material characteristics are not implied by this certificate or by the original report.

Certificate authorized by:

Joseph Lin Laboratory Manager



This certification applies to the particular sample tested and to the specific tests carried out as dated and detailed in the report referenced above. It does not signify any measure of approval, control, supervision, or surveillance by Vartest Laboratories Inc. to this or any related product. Unless otherwise specified, all compliance statements are simple acceptance.



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ANSI/ISEA 107-2020 Combined Performance Test Results Summary

Submitted by: La Casa Del Reflectivo S.A.S Name: Fluorescent Lime-Yellow Reflective Tape Style #: PVC-HW1006050-FLY Color Fl. Yellow-Green

Date: April 27, 2023 Test Report #: VCANBU.A102422A3

The submitted material **MEETS** all Photometric performance requirements of combined performance material prior to test exposure per ANSI/ISEA 107-2020 clause 9.1 for minimum coefficient of retroreflection for retroreflective trim.

The submitted material **MEETS** all photometric performance requirements of combined performance material after test exposure per ANSI/ISEA 107-2020 clause 9.2 for minimum coefficient of retroreflection for retroreflective trim after abrasion, flexing, folding at cold temperatures, temperature variation, washing per ISO 6330 6N, F (Tumble Dry @ 50°C) (25 cycles, 50 cycles, 75 cycles, 100 cycles), and rainfall.

Retroreflective Material

Retroreflective, Performance, Initial	Passed
Abrasion	
Flexing	Passed
Folding at Cold Temperatures	Passed
Exposure to Temperature Variation	Passed
Washing Per ISO 6330 6N, F (Tumble Dry @ 50°C) (25X, 50X, 75X, 100X).	
Retroreflective Performance in Rainfall	Passed



Signed For The Company By

Joseph Lin Laboratory Manager

ACCREDITED
Testing Cert #2180.01

This certification applies to the particular sample tested and to the specific tests carried out as dated and detailed in the report referenced above. It does not signify any measure of approval, control, supervision, or surveillance by Vartest Laboratories Inc. to this or any related product. Unless otherwise specified, all compliance statements are simple acceptance.



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ISO/ICC 17025 Third Party Test Report

DATE:

April 27, 2023

FILE: VCANBU.A102422A3

CLIENT:

La Casa Del Reflectivo S.A.S

ATTN: Johana Bi

Calle 38 A sur. 74-78 Bogota, Colombia

SAMPLE IDENTIFIED BY CLIENT AS:

Combined Performance Tape Submitted Per ANSI/ISEA 107-2020 Specification

Name: Fluorescent Lime-Yellow Reflective Tape

Style #: PVC-HW1006050-FLY

Color Fl. Yellow-Green

TEST PROCEDURES:

TEST RESULTS:

Retroreflective Material Testing Report

PHOTOMETRIC PERFORMANCE:

Take Measurements at $\varepsilon_1 = 0^\circ$ and $\varepsilon_2 = 90^\circ$. Record maximum value on left side of test result column and the other value on right side of test result column.								
ANSI/ISEA 107 REQUIREMENT Section 9.1, Table 4			Test Result					
Observation Angle	Entrance Angle	Minimum	cd/(lx	Pass/Fail				
12' (0.2°)	5°		580	369	Pass			
	20°	290 / 218	471	335	Pass			
N	30°	180 / 135	345	259	Pass			
2	40°	65 / 47	248	193	Pass			
20' (0.33°)	5°	250 / 188	394	205	Pass			
	20°	200 / 150	309	187	Pass			
	30°	170 / 128	229	151	Pass			
	40°	60 / 45	186	137	Pass			
1.0°	5°	25 / 18.8	134	82.5	Pass			
	20°	15 / 11.3	112	77.6	Pass			
	30°	12 / 9	53.8	39.1	Pass			
	40°	10 / 7.5	34.1	26.8	Pass			
1.5°	5°	10 / 7.5	34.3	24.3	Pass			
	20°	7 / 5.25	34.0	20.4	Pass			
	30°	5 / 3.75	23.6	14.4	Pass			
	40°	4/3	17.9	10.5	Pass			





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ISO/ICC 17025 Third Party Test Report

FILE: VCANBU.A102422A3

SAMPLE IDENTIFIED BY CLIENT AS:

Combined Performance Tape Submitted
Per ANSI/ISEA 107-2020 Specification
Name: Fluorescent Lime-Yellow Reflect

Name: Fluorescent Lime-Yellow Reflective Tape

Style #: PVC-HW1006050-FLY Color Fl. Yellow-Green

Retroreflective Material Testing Report

PHYSICAL PERFORMANCE:

8	Take Meas	surements at $\varepsilon_1 = 0^{\circ}$ and $\varepsilon_2 = 90^{\circ}$.			
Test	Section	ANSI/ISEA 107 Requirement	Test Result		Pass/Fail
Retroreflection, after abrasion	9.2, 10.4.1	$R_A (0.2^{\circ}/5^{\circ}) > 100 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_1$ $R_A (0.2^{\circ}/5^{\circ}) > 75 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_2$	$\varepsilon_{1:}$ $\varepsilon_{2:}$	403 246	Pass
Retroreflection, after flexing	9.2,	$R_A (0.2^{\circ}/5^{\circ}) > 100 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_1$	ε_{2} . ε_{1} :	462	Pass
	10.4.2	$R_A (0.2^{\circ}/5^{\circ}) > 75 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_2$	<i>E</i> 2:	331	1 455
Retroreflection, after folding at cold temperatures Observation: No Cracks	9.2, 10.4.3	$R_A (0.2^{\circ}/5^{\circ}) > 100 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_1$ $R_A (0.2^{\circ}/5^{\circ}) > 75 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_2$	$\varepsilon_{1:}$ $\varepsilon_{2:}$	369	Pass
Retroreflection, after exposure	9.2,	$R_A (0.2^{\circ}/5^{\circ}) > 100 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_1$	<i>ε</i> 1:	503	Pass
to temperature variation	10.4.4	$R_A (0.2^{\circ}/5^{\circ}) > 75 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_2$	<i>E</i> 2:	360	
Retroreflection, after washing ISO 6330-2012, 6N, F(Tumble Dry at 50°C), 25 cycles	9.2, 10.4.5.2	$R_A (0.2^{\circ}/5^{\circ}) > 100 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_1$ $R_A (0.2^{\circ}/5^{\circ}) > 75 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_2$	ε_{1} :	310 245	Pass
Retroreflection, after washing ISO 6330-2012, 6N, F(Tumble Dry	9.2,	$R_A (0.2^{\circ}/5^{\circ}) > 100 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_1$	$\varepsilon_{1:}$	318	Dogg
10.4.5.2 R_A (0.2°/5°) > 75 cd/(lx.m²) at ε_2		<i>E</i> 2:	268	Pass	
Retroreflection, after washing	9.2,	RA $(0.2^{\circ}/5^{\circ}) > 100 \text{ cd/(lx.m2)}$ at $\varepsilon 1$	$\epsilon_{1:}$	288	D
ISO 6330-2012, 6N, F(Tumble Dry at 50°C), 75 cycles	10.4.5.2	RA $(0.2^{\circ}/5^{\circ}) > 75 \text{ cd/(lx.m2)}$ at $\varepsilon 2$	€ 2:	243	Pass
Retroreflection, after washing	9.2,	RA $(0.2^{\circ}/5^{\circ}) > 100 \text{ cd/(lx.m2)}$ at $\varepsilon 1$	E 1:	243	Pass
ISO 6330-2012, 6N, F(Tumble Dry at 50°C), 100 cycles	10.4.5.2	RA $(0.2^{\circ}/5^{\circ}) > 75 \text{ cd/(lx.m2)}$ at $\epsilon 2$	<i>E</i> 2:	201	
Retroreflection, in rainfall	9.2,	$R_A (0.2^{\circ}/5^{\circ}) > 100 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_1$	E 1:	428	Pass
	10.4.6	$R_A (0.2^{\circ}/5^{\circ}) > 75 \text{ cd/(lx.m}^2) \text{ at } \varepsilon_2$	<i>E</i> 2:	302	

Signed For The Company By

Joseph Lin

Laboratory Manager

CF/04



Stacy Sadowy Quality Assurance Manager

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