

TEST REPORT

Hardline Laboratory

Report No. : YA40091/2020

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Date : May 08, 2020

Suzhou LYlap Optical Technology Co., Ltd.

NO. 66-26 Linggang Road, Luzhi Town, Wuzhong District,
Suzhou, Jiangsu

The following merchandise was submitted and identified by the applicant as:

Style/Item No.: LYM001

Manufacturer/Vendor: Suzhou LYlap Optical Technology Co., Ltd.

SGS Reference No.: SHHL2004512248MD

We have tested the submitted sample(s) as requested and the following results were obtained:

Test Requested: ANSI/ISEA Z87.1-2015 American National Standard for Occupational and Educational Personal Eye and Face Protection Devices

Optional Requirements: 8.1 Droplet and Splash Hazard

Test Method & Result: --- See following sheet(s) ---

Date of Receipt: APR. 20, 2020

Testing Period: APR. 20 ~ MAY 08, 2020

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Testing site:
61, Kai-Fa Road, Nanzih Export Processing Zone, 81170, Kaohsiung, Taiwan

Signed for and on behalf of
SGS Taiwan Ltd.


Owen Cheng
Manager



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Test Method & Result

ANSI/ISEA Z87.1-2015 American National Standard for Occupational and Educational Personal Eye and Face Protection Devices

Section

5. General Requirements
5.1 Optical Requirements
5.1.1 Optical Quality

Result

Pass

5.1.2 Luminous Transmittance

Pass

Finding

Lens Type	Luminous Transmittance Requirement	Test Value	
		Left Ocular	Right Ocular
Clear Lenses	85% min.	89.14 %	87.51 %

5.1.3 Haze

Pass

Finding

Lens Type	Haze Requirement	Test Value	
		Left Ocular	Right Ocular
Clear Lenses	3% max. – Clear Lenses Only	1.1 %	1.0 %

5.1.4 Refractive Power, Astigmatism, Resolving Power, Prism and Prism Imbalance for Plano Protectors

Pass

Finding

Test/Property	Requirement	Test Value	
		Left Ocular	Right Ocular
Refractive Power	No requirement	No requirement	No requirement
Astigmatism	No requirement	No requirement	No requirement
Resolving Power	Pattern 20 min.	Pattern 20	Pattern 20
Prism	$\leq 0.37 \Delta$	$< 0.37 \Delta$	$< 0.37 \Delta$
Vertical Prism Imbalance	$\leq 0.37 \Delta$	0.00 Δ	
Horizontal Prism Imbalance	$\leq 0.125 \Delta$ (Base In) $\leq 0.75 \Delta$ (Base Out)	0.10 Δ (Base Out)	

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Test Result

Section

5.1.5 Refractive Power, Astigmatism, Prism and Prism Imbalance for Prescription Protectors and Magnifiers Result
N/A

5.2 Physical Requirements Pass

5.2.1 Drop Ball Impact Resistance Pass
See Finding

Finding

None of the following defects occurred:

- Lens (Lens only) fractures
- piece fully detached from the inner surface
- projectile penetrates the inner surface
- lens not retained

5.2.2 Ignition Pass

5.2.3 Corrosion Resistance of Metal Components N/A

5.2.4 Minimum Coverage Area Pass

5.3 Markings See Finding

Protector markings shall be placed in relatable proximity to each other on the product in the sequence specified below:

- Manufacturer's marks or logos
- Designation of standard (Z87 or Z87-2, for prescription devices)
- Individual claims of compliance
 - Impact-rated marking (+)
 - Lens type
 - Use applications

Finding

Manufacturer's marks or logo		Standard	Impact Mark		Lens Type	Use
Lens:	No Claim	No Claim	Lens:	No Claim	No Claim	No Claim
Frame:	No Claim		Frame:	No Claim		

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5.4 Other Requirements

Result

N/A

5.5 Replaceable Lenses

N/A

5.6 Aftermarket Components and Accessories

N/A

6. Impact-Rated Protector Requirements

N/A

6.1 General

6.1.1 Protectors Marked for Impact Protection

N/A

6.1.2 Frames and Shells

N/A

6.1.3 Lateral (Side) Coverage

N/A

6.2 Impact Requirements

6.2.1 Protector Acceptance Criteria

6.2.2 High Mass Impact

N/A

6.2.3 High Velocity Impact

N/A

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6.2.4 Penetration Test (lenses only)

Result

N/A

6.2.5 Prescription Lens Material Qualification

N/A

6.2.6 Prescription Lens Mounting Qualification

N/A

6.2.7 Devices with Lift Fronts

N/A

7. Optical Radiation Protector Requirements

N/A

8. Droplet and Splash, Dust, and Fine Dust Protection Requirements

8.1 Droplet and Splash Hazard

Pass

Remark:

1. The samples are complete devices claimed by applicant.
2. Samples were provided by applicant and samples were randomly selected to be assessed.
3. N/A = Not Applicable
4. Only applicable sections were shown.
5. The content of this report is invalid if it is not presented as the entire report.
6. The statement of conformity is based on the test results, but does not include the measurement uncertainty.

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– Picture(s) –



Photo "A" : Appearance of sample

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