TEST REPORT

Mechanical & Hardgoods Laboratory

Report No.： YA20058/2019
Page： 1 of 6
Date： MAR. 07, 2019

SLP PENTERPRISES LLC
60 THOREAU STREET, CONCORD, MA, 01742, U.S.A.

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

Product Description: KIDS SUNGLASSES
Style/Item No.: SURF
Country of Origin: TAIWAN

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

Test Requested: EN ISO 12312-1:2013+A1:2015 Eye and face protection — Sunglasses and related eyewear — Part 1:Sunglasses for general use
Clause 4.1, 4.2, 5.2, 5.3, 6.1, 6.2, 6.3, 7.1, 8, 9

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

Date of Receipt: FEB. 23, 2019

Testing Period: FEB. 23 ~ MAR. 07, 2019

--- See Next Page ---

Signed for and on behalf of
SGS Taiwan Ltd.

Owen Cheng
Manager

Laboratory address:
61, Kai-Fa Road, Nanzih Export Processing Zone, 81170, Kaohsiung, Taiwan

TEST REPORT

Test Method & Result

EN ISO 12312-1:2013+A1:2015 Eye and face protection — Sunglasses and related eyewear — Part 1: Sunglasses for general use

Clause	Result
4 Construction and materials	
4.1 Construction	Pass

Finding
Sample was assessed. None of the defects listed in the Standard was appeared.

4.2 Filter material and surface quality	Pass

Finding
Sample was assessed. None of the defects listed in the Standard was appeared.

5 Transmittance	
5.2 Transmittance and filter categories	Category 3

Finding

Sample	Filter Category	Range	Requirement	Test Value	
				Left Ocular	Right Ocular
1	3	380 ~ 780 nm Luminous Transmittance (Tv)	8 ~ 18 %	13.73 %	12.00 %
		280 ~ 315 nm T_{SUVB}	＜1.0 %	0.00 Tv (0.01 %)	0.00 Tv (0.01 %)
		315 ~ 380 nm T_{SUVA}	＜0.5 Tv	0.00 Tv (0.01 %)	0.00 Tv (0.01 %)

--- See Next Page ---

TEST REPORT

Test Result

Clause	Result
5.3 General transmittance requirements	
5.3.1 Uniformity of luminous transmittance	Pass

Finding

Sample	Filter Category	Test Item	Requirement	Test Value	
				Left Ocular	Right Ocular
1	3	Variation within filter	＜10 %	2.39 %	0.72 %
		Difference between filter	≦15 %	12.56 %	

5.3.2 Requirements for road use and driving

5.3.2.1 General Pass

Filters suitable for road use and driving shall be of categories 0, 1, 2 or 3 and shall additionally meet the following two requirements.

(a) Spectral transmittance

Finding

Sample	Filter Category	Range	Requirement (Minimum Spectral Transmittance)	Test Value	
				Left Ocular	Right Ocular
1	3	475 ~ 650 nm	≧0.2 Tv	0.89 Tv (12.20 %)	0.90 Tv (10.76 %)

(b) Detection of signal lights

Finding

Sample	Filter Category	The Relative Visual Attenuation Quotient Q	Requirement	Test Value	
				Left Ocular	Right Ocular
1	3	Red	≧0.80	1.17	1.19
		Yellow	≧0.60	1.05	1.06
		Green	≧0.60	0.97	0.97
		Blue	≧0.60	0.97	0.96

5.3.2.2 Driving in twilight or at night See Note *

Note *: Sunglass filters with a luminous transmittance of less than 75% shall not be used for road use and driving in twilight or at night.

--- See Next Page ---

TEST REPORT

Test Result

Clause	Result
5.3.3 Wide angle scattering	Pass

Finding

Sample	Requirement	Test Value	
		Left Ocular	Right Ocular
1	≦3 %	1.9 %	1.9 %

6 Refractive power

6.1 Spherical and astigmatic power — Pass

Finding

Sample	Requirement	Spherical Power (m^{-1})		Astigmatic Power (m^{-1})	
		±0.12		≦0.12	
2	Test Value	Left Ocular	Right Ocular	Left Ocular	Right Ocular
		-0.04	-0.02	0.06	0.06

Sample	The Spherical Powers Difference Between Right And Left Filters (m^{-1})	Test Value (m^{-1})
2	≦0.18	0.02

6.2 Local variations in refractive power — N/A

6.3 Prism imbalance (relative prism error) — Pass

Finding

Sample	Requirement	Prism Imbalance		
		Horizontal (cm/m)		Vertical (cm/m)
		Base Out	Base In	
		＜1.00	＜0.25	＜0.25
2	Test Value	0.15	--	0.00

--- See Next Page ---

TEST REPORT

Test Result

Clause — Result

7 Robustness

7.1 Minimum robustness of filters — Pass

Finding

Sample was assessed. None of the defects listed in the Standard was appeared on both left and right oculars.

8 Resistance to solar radiation — Pass

Finding

Sample	Filter Category	Permitted Relative Change In Luminous Transmittance After Test	Test Value	
			Left Ocular	Right Ocular
1	3	±10 %	1.17 %	2.42 %

Following additional requirements shall be complied with also after the irradiation process.

Finding

a. Wide angle scattering — Pass

Sample	Requirement	Test Value	
		Left Ocular	Right Ocular
1	≦3 %	1.7 %	1.9 %

b. Requirements For The Ultraviolet Spectral Range For Initial Tv (Luminous Transmittance) — Pass

Sample	Filter Category	Range	Requirement	Test Value	
				Left Ocular	Right Ocular
1	3	280 ~ 315 nm **TSUVB**	＜1 %	0.00 Tv (0.01 %)	0.00 Tv (0.01 %)
		315 ~ 380 nm **TSUVA**	＜0.5 Tv	0.00 Tv (0.01 %)	0.00 Tv (0.01 %)

--- See Next Page ---

TEST REPORT

Mechanical & Hardgoods Laboratory

Report No.： YA20058/2019
Page： 6 of 6

Test Result

Clause	Result
9 Resistance to ignition	Pass

Finding

Sample was assessed. Sample was not ignited or continued to glow after removal of the steel rod.

– Picture(s) –

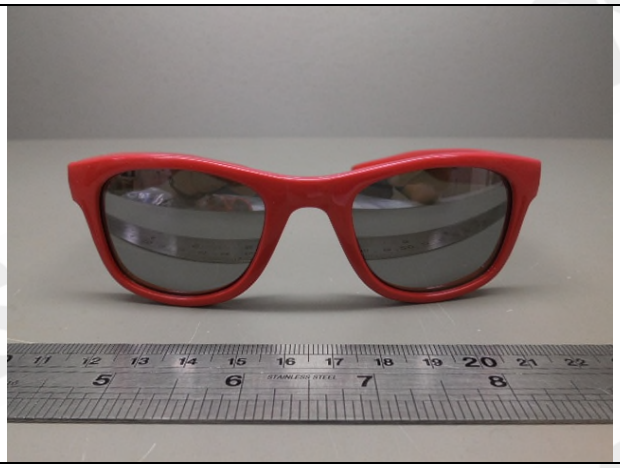	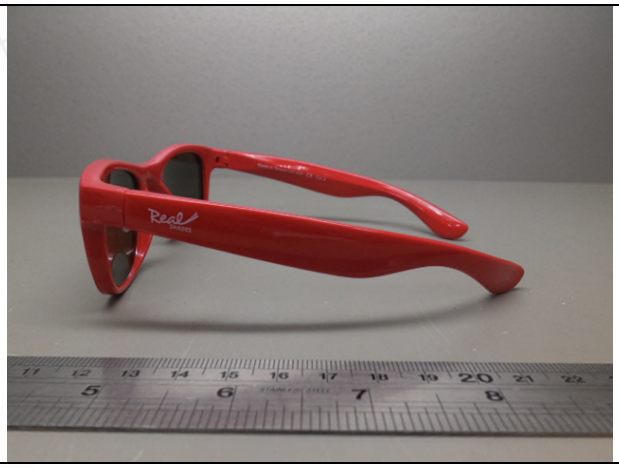
Photo “A” : Appearance of sample (front view)	Photo “B” : Appearance of sample (side view)

--- End of Report ---