

TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : YA20051/2019

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Date : MAR. 15, 2019

PRO-SIGHT OPTICAL CO., LED

1F., NO.30, Ln.9, FUDE St., Luzhu Dist., Kaohsiung City 821,
Taiwan (R.O.C)

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

Product Description: Photochromic lens

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

Test Requested: To refer to EN ISO 12312-1:2013+A1:2015 Eye and face protection — Sunglasses and related eyewear — Part 1: Sunglasses for general use
Clause 5.2 Transmittance and filter categories
Clause 5.3.3 Wide angle scattering
Clause 5.3.4 Additional transmittance requirements for specific filter types
Clause 8 Resistance to solar radiation

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


Date of Receipt: FEB. 20, 2019

Testing Period: FEB. 20 ~ MAR. 15, 2019

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Laboratory address:
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

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

Clause

5 Transmittance

5.2 Transmittance and filter categories

Finding

(Faded state)

Sample	Filter Category	Range	Requirement	Test Value
1	0	380 ~ 780 nm Luminous Transmittance (Tv0)	> 80 %	84.66 %
		280 ~ 315 nm TSUVB	< 0.05 Tv0	0.00 Tv0 (0.01 %)
		315 ~ 380 nm TSUVA	< Tv0	0.00 Tv0 (0.01 %)

(Darkened state)

Sample	Filter Category	Range	Requirement	Test Value
1	2	380 ~ 780 nm Luminous Transmittance (Tv1)	18 ~ 43 %	28.21 %
		280 ~ 315 nm TSUVB	< 0.05 Tv1	0.00 Tv1 (0.01 %)
		315 ~ 380 nm TSUVA	< 0.5 Tv1	0.00 Tv1 (0.01 %)

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Test Result

Clause

5.3.3 Wide angle scattering

Finding

Sample	Requirement	Test Value
1	< 3 %	0.15 %

5.3.4 Additional transmittance requirements for specific filter types

5.3.4.1 Photochromic filters

Finding

Sample	Requirement	Test Value
1	$Tv0 / Tv1 \geq 1.25$	3.00

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Test Result

Clause

8 Resistance to solar radiation

Finding

Sample	Filter Category	Permitted Relative Change In Luminous Transmittance After Test	Test Value
1	0	$\pm 5\%$	-3.51 %

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

a. Wide angle scattering

Sample	Requirement	Test Value
1	$< 3\%$	0.21 %

b. For photochromic filters, $Tv0' / Tv1'$ (after radiation) shall be ≥ 1.25

Sample	Requirement	Test Value
1	$Tv0'(81.69\%) / Tv1'(29.27\%) \geq 1.25$	2.79

c. Requirements For The Ultraviolet Spectral Range For Initial $Tv0$ (Luminous Transmittance)

Sample	Filter Category	Range	Requirement	Test Value
1	0	280 ~ 315 nm TSUVB	$< 0.05 Tv0$	0.00 $Tv0$ (0.01 %)
		315 ~ 380 nm TSUVA	$< Tv0$	0.00 $Tv0$ (0.01 %)

Remark: The values of test requirements were specified by applicant.

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– Picture(s) –

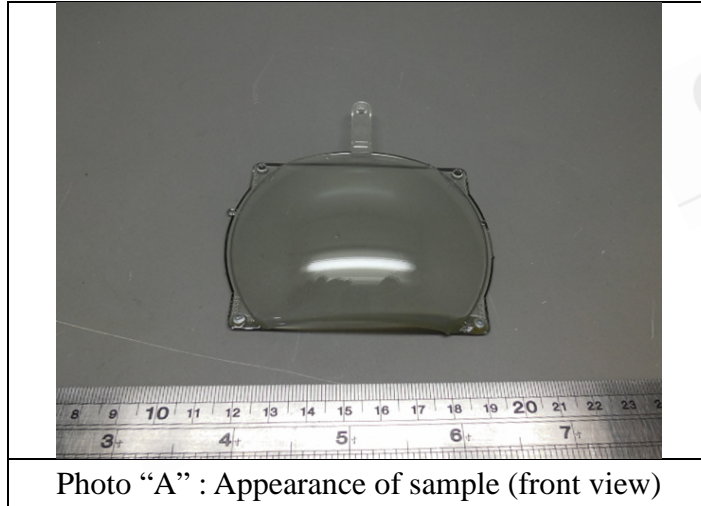


Photo "A" : Appearance of sample (front view)

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