

TEST REPORT

Hardline Laboratory

Report No.: YA10013/2020

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Date: JAN. 22, 2020

ECOSHINE TECHNOLOGY CO., LTD.

102R, R1 Building No. 31 Gongye 2nd Rd., Anping Dist.,
Tainan City, 709, Taiwan (R.O.C.)

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

Product Description: Infra Red Optical Lens
Style/Item No.: IRS310
Manufacturer/Vendor: ECOSHINE TECHNOLOGY CO., LTD.
Country of Origin: TAIWAN

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

Test Requested:

1. BS EN 172:1995 Personal eye-protection – Sunglare filters for industrial use
Clause 4.1.2 Filters with code number 6
2. 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
3. ANSI/ISEA Z87.1-2015 American National Standard for Occupational and Educational Personal Eye and Face Protection Devices
Table 8. Transmittance Requirements for Infrared Filter Lenses

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

Date of Receipt: JAN. 08, 2020

Testing Period: JAN. 08 ~ 22, 2020

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Signed for and on behalf of
SGS Taiwan Ltd.


Owen Cheng
Manager



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

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Test Method & Result:

BS EN 172:1995 Personal eye-protection – Sunglare filters for industrial use

Clause

4.1 Permissible transmittance and scale numbers

4.1.2 Filters with code number 6

Result
Scale number

6-2,5

Finding

Scale number 6-2,5	Range of luminous transmittance τ_v	
	From (%)	To over (%)
Requirement	17.8 %	29.1 %
Sample	Test Value	
01	19.06 %	

Scale number 6-2,5	Maximum value of infra-red transmittance τ_{SIR}	
	Requirement < τ_v	
Sample	Test Value	
01	5.02 %	

Additional requirements	Sample	Requirement	Test Value	
			Left Ocular	Right Ocular
a)Maximum value of spectral transmittance τ_v From 280nm to 315nm	01	<0.1 τ_v	0.00 % (0.00 τ_v)	0.00 % (0.00 τ_v)
b)Maximum value of spectral transmittance τ_v Over 315nm to 350nm	01	< τ_v	0.00 % (0.00 τ_v)	0.00 % (0.00 τ_v)
c)Maximum mean value of spectral transmittance τ_v From 315nm to 380nm	01	< τ_v	0.00 % (0.00 τ_v)	0.00 % (0.00 τ_v)

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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

Result

Category 2

Finding

Filter Category	Range	Requirement	Test Value
2	380 ~ 780 nm Luminous Transmittance (τ_v)	18 ~ 43 %	19.07 %
	780 ~ 2000 nm Solar IR Transmittance (τ_{SIR})	< τ_v	5.02 %
	280 ~ 315 nm τ_{SUVB}	< 1.0 %	0.00 Tv (0.00 %)
	315 ~ 380 nm τ_{SUVA}	< 0.5 τ_v	0.00 Tv (0.00 %)

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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

Clause

- 5. General Requirements
- 5.1 Optical Requirements
- 5.1.2 Luminous Transmittance

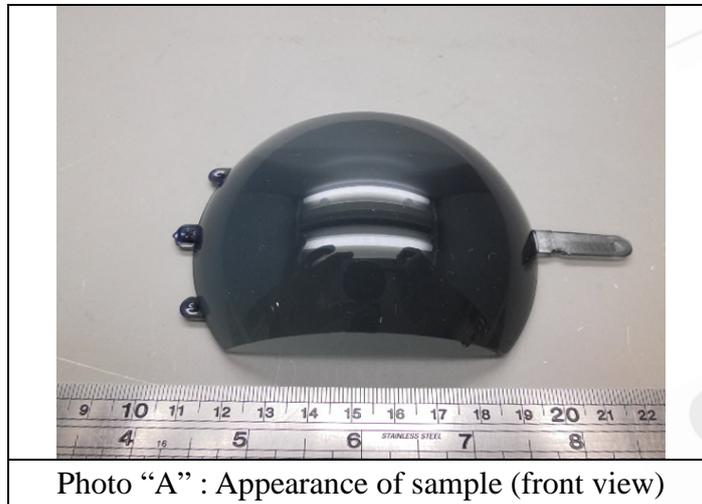
Result

Scale number
R4

Finding

Scale	Maximum Infrared Average Transmittance %	Test Value
R4	< 5%	3.53 %

– Picture(s) –



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