

Customer reference : SS0166  
CAIGUNA 2131039  
ORLAB reference : 21280.6  
ORLAB method : ORLAB 2.53.3  
Date of issue : 7 February 2022  
Date tested : 12 January 2022

Ms Ashlie Callinan  
Sunshades  
Unit A/110 McEvoy St  
Alexandria NSW 2015

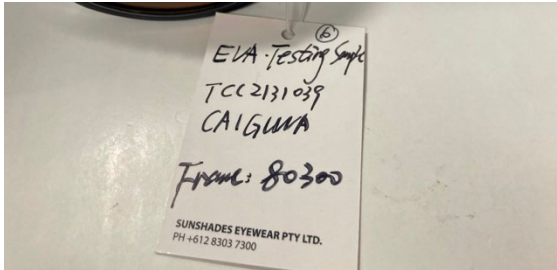
**EVALUATION TESTS TO**  
**Consumer Goods (Sunglasses and Fashion Spectacles) Safety Standard 2017**

Submitted for test by : Sunshades  
Supplier : Sunshades  
Manufacturer : Not supplied  
Identifier : 21280-6

**DESCRIPTION OF SAMPLE**

	Material	Colour(s)			
<b>Frame front</b>	Plastic	Matte black			
<b>Sides</b>	Plastic	Brown tortoiseshell			
<b>Side ends</b>	None	N/A			
	Material	Colour(s)	Tint	Type	Coating
<b>Filters</b>	Plastic	Brown	Uniform	Polarising	Unknown
<b>Markings</b>	<b>Front</b>	None			
	<b>Filters</b>	None			
	<b>Right side</b>	<b>Inside</b>	CAIGUNA 2131039	<b>Outside</b>	None
	<b>Left side</b>	<b>Inside</b>	CANCER COUNCIL - POLARISED	<b>Outside</b>	None
<b>Packaging</b>	None				
<b>Stick on label</b>	None				
<b>Swing-tag</b>	Refer to photo				

*This report may not be published except in full unless permission for the publication of an approved extract has been obtained in writing.*



## SECTION 4 CONSTRUCTION AND MATERIALS

### 4.1 Construction

Pass

## SECTION 5 TRANSMITTANCE

### 5.2 TRANSMITTANCE AND FILTER CATEGORIES

See below

Light tint sunglasses	Category 0	over 80%	to	100%
Light tint sunglasses	Category 1	over 43%	to	80%
General purpose sunglasses	Category 2	over 18%	to	43%
General purpose sunglasses	Category 3	over 8%	to	18%
Very dark special purpose sunglasses	Category 4	over 3%	to	8%

Minimum spectral transmittance for wavelengths 475nm – 650nm  $\geq 0.20 \tau_v$

Minimum relative visual attenuation for signal light detection (Q)

Red	$\geq 0.80$
Blue	$\geq 0.70$
Yellow, Green	$\geq 0.60$

UV spectral range	Maximum	Category 0 – 1	280-315nm	315-400nm
		Category 2 -3	0.05 $\tau_v$	$\tau_v$
		Category 4	0.05 $\tau_v$	0.5 $\tau_v$
			0.05 $\tau_v$	1.0% absolute or 0.25 $\tau_v$

	Right Eye	Left Eye	Compliance
280-315nm (%)	<0.1	<0.1	Pass
315-400nm (%)	<0.1	<0.1	Pass
Min Spect Trans	0.38	0.38	Pass
$\tau_v$ (%)	15.0	14.9	
Category	3	3	Category 3
Q <sub>Red</sub>	1.57	1.58	Pass
Q <sub>Yellow</sub>	1.24	1.25	Pass
Q <sub>Green</sub>	0.86	0.86	Pass
Q <sub>Blue</sub>	0.67	0.67	Warning required

This report may not be published except in full unless permission for the publication of an approved extract has been obtained in writing.



Accredited for compliance with ISO/IEC 17025 - Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration and inspection reports

Report No. 21280.6

Page 2 of 6

Checked by

AA

**5.3 GENERAL TRANSMITTANCE REQUIREMENTS**

**5.3.1 Uniformity of luminous transmittance** See below

*Transmittance matching (relative to the lighter filter)* *Maximum*  $\leq 15\%$

Right Eye	Left Eye	Matching	Compliance
14.9%	15.0%	0.6%	Pass

**5.3.2 Requirements for road use and driving**

- 5.3.2.1 General
- 5.3.2.2 Spectral transmittance Refer to clause 5.2
- 5.3.2.3 Detection of signal lights Warning required
- 5.3.2.4 Driving in twilight or at night (Category 1-3) Warning required

**5.3.3 Wide angle scattering** See below

*Haze* *Maximum*  $\leq 3.0\%$

Right Eye	Left Eye	Compliance
1.5%	1.6%	Pass

**5.3.4 Additional transmittance requirements for specific filter types**

- 5.3.4.1 Photochromic filters N/A
- 5.3.4.2 Polarizing lenses See table below

*Plane of polarization* *Maximum* *Individual lens*  $\leq 5^\circ$   
*Misalignment of lenses*  $\leq 6^\circ$

*Ratio of luminous transmittance* *Maximum* *Lens categories 2,3,4*  $\geq 8:1$   
*Lens category 1*  $\geq 4:1$

	Right Lens	Compliance	Left Lens	Compliance	Misalignment	Overall Compliance
<b>Plane of Polarization</b>	-0.5°	Pass	-0.5°	Pass	0.0°	Pass
<b>Ratio of Luminous Transmittance</b>	35:1	Pass	35:1	Pass	N/A	Pass

**5.3.4.3 Gradient filters** N/A

**5.3.5 Claimed transmittance properties** No claims made

- 5.3.5.3 Antireflective coated sunglasses No claims made
- 5.3.5.4 Enhanced infrared absorption No claims made

*This report may not be published except in full unless permission for the publication of an approved extract has been obtained in writing.*



Accredited for compliance with ISO/IEC 17025 - Testing  
 The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Report No. 21280.6  
 Page 3 of 6  
 Checked by

NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration and inspection reports

AA

**SECTION 6 REFRACTIVE POWER**

**6.1 SPHERICAL AND ASTIGMATIC POWER**

See below

*Spherical Power* *Limit*  $\pm 0.12 D$   
*Spherical Power Difference* *Maximum*  $0.18 D$   
*Astigmatic Power* *Maximum*  $\pm 0.09 D$

<b>Spherical Power (diopetre)</b>					
Right Eye	Compliance	Left Eye	Compliance	Difference	Compliance
-0.054	Pass	-0.046	Pass	0.008	Pass

<b>Astigmatic Power (diopetre)</b>			
Right Eye	Compliance	Left Eye	Compliance
0.013	Pass	0.002	Pass

**6.2 LOCAL VARIATIONS IN REFRACTIVE POWER**

Not required

**6.3 PRISM IMBALANCE (RELATIVE PRISM ERROR)**

See below

*Prism imbalance* *Maximum* *Vertical*  $\leq 0.25 \Delta$   
*Horizontal (in)*  $\leq 0.25 \Delta$   
*Horizontal (out)*  $\leq 1.00 \Delta$

Base In / Out	Horizontal	Compliance	Vertical	Compliance
Out	0.16	Pass	0.01	Pass

**SECTION 7 ROBUSTNESS**

**7.1 GENERAL**

See below

**7.2 FRAME DEFORMATION AND RETENTION OF FILTERS**

Pass

**7.3 ROBUSTNESS AND FILTER RETENTION, STRENGTH LEVEL 1**

Pass

**SECTION 9 RESISTANCE TO IGNITION**

Material known and tested previously

**SECTION 11 PROTECTIVE REQUIREMENTS**

**11.1 COVERAGE AREA**

Pass

**11.2 TEMPORAL PROTECTIVE REQUIREMENTS**

N/A

*This report may not be published except in full unless permission for the publication of an approved extract has been obtained in writing.*



Accredited for compliance with ISO/IEC 17025 - Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration and inspection reports

Report No. 21280.6

Page 4 of 6

Checked by

AA

**SECTION 12 INFORMATION AND LABELLING**

**12.1 INFORMATION TO BE SUPPLIED WITH EACH PAIR OF SUNGLASSES**

The manufacturer shall provide the following information in the form of markings on the frame or on labels, packaging, etc., that accompanies the sunglasses at the point of sale.

- |                                                                                                                                                                                                                                                                                                                                           |                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| (a) Identification of model                                                                                                                                                                                                                                                                                                               | Present                           |
| (b) Name and address of the manufacturer/supplier                                                                                                                                                                                                                                                                                         | Required                          |
| (d) Type of filter, if photochromic and/or polarizing                                                                                                                                                                                                                                                                                     | Present                           |
| (e) Number of the filter category                                                                                                                                                                                                                                                                                                         | Required                          |
| (f) Description of the filter category in the form of category number, description and usage as given in Table 5 (symbol min height 5mm)                                                                                                                                                                                                  | Required                          |
| (g) Restrictions of use, which shall include at least the following-<br>Not for direct observation of the sun;<br>Not for protection against artificial light sources, eg. solaria<br>Not for use as eye protection against mechanical impact hazards<br>Any other restrictions deemed appropriate to be communicated by the manufacturer | Required                          |
| (h) Non-conforming filters - (Fig 2. symbol min height 5mm)<br>Not suitable for driving and road use<br>Category 4 filters                                                                                                                                                                                                                | Warnings required<br>N/A          |
| (i) Category 1 to 3 filters<br>Instructions for care and cleaning (if relevant)                                                                                                                                                                                                                                                           | Warnings required<br>Not provided |

**12.2 ADDITIONAL INFORMATION**

The following information shall be available from the manufacturer on request.

- (b) The position of the reference point when different from the one defined in this Standard.
- (d) The nominal value of luminous transmittance
- (e) Transmission requirements applicable to this product
- (f) Polarization efficiency in cases of polarising filters
- (g) The base material of filters and frame

**12.3 METHODS OF MARKING AND LABELLING**

- |        |                   |          |
|--------|-------------------|----------|
| 12.3.1 | Form of labelling | Not seen |
| 12.3.3 | Legibility        | Not seen |

*This report may not be published except in full unless permission for the publication of an approved extract has been obtained in writing.*



Accredited for compliance with ISO/IEC 17025 - Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration and inspection reports

Report No. 21280.6

Page 5 of 6

Checked by

AA


These sunglasses DO meet the requirements of the Consumer Goods (Sunglasses and Fashion Spectacles) Safety Standard 2017, provided the additional information as required in Section 12 accompanies the glasses.

The Standard requires these sunglasses be accompanied by the appropriate labelling as specified below.

- a) Identification of model
- b) Name and address of the manufacturer

Filter category, type (polarising) and description

See below

Filter category	Description	Usage	Additional required information	Symbol
3	General purpose sunglasses	High protection against sunglare Good UV protection	Not suitable for driving in twilight or at night; or not suitable for driving at night or under dull light conditions	
NOTE: Use of the pictograms is optional. If used the min height of the symbols shall be 5mm.				

(g) Restrictions of use

(h) **NOT SUITABLE FOR DRIVING AND ROAD USE**



(i) Instructions for care and cleaning (if relevant)



Ashley Ang  
Authorised Signatory

Notes: The uncertainties stated in this report have been calculated in accordance with principles in the ISO Guide to the Expression of Uncertainty in measurement, and give intervals estimated to have a level of confidence of 95%. A coverage factor (k) of 2.0 was used.

The following least uncertainties for the measurements reported have been taken into account when assessing compliance:

Luminous transmittance	±0.1%	Q factors	±0.01
Refractive power	±0.005 D	Prismatic power	±0.01 Δ
Scattered light	±0.1%	Axis of polarisation	±0.5°
Uncertainties in UV transmittance comply with ISO 12311:2013, Clause 7.1.1.1 and Table 1.			

*This report may not be published except in full unless permission for the publication of an approved extract has been obtained in writing.*



Accredited for compliance with ISO/IEC 17025 - Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration and inspection reports

Report No. 21280.6

Page 6 of 6

Checked by

AA