THE UNIVERSITY OF **NEW SOUTH WALES**



Optics & Radiometry Laboratory

School of Optometry and Vision Science Rm LG22, Old Main Bldg (K15) Gate 14 Barker Street UNSW Kensington NSW 2033 Phone: +61 2 9385 4622 Fax: +61 2 9313 8602

E-mail: orlab@unsw.edu.au

Your reference

MG-10 Smoke

Our reference

12059.1

Date of issue

8 March 2012

Date tested :

24 February 2012

Mr Dean Bennell Blueye Eyewear 4/25 Tramore Place Killarney Heights NSW 2087

EVALUATION TESTS TO ANSI/ISEA Z87.1-2010: Occupational and Educational Eye and Face Protection Devices

Submitted for test by

Blueye Eyewear

Supplier

Blueye Eyewear

Manufacturer

Not supplied

Identifier

12059-1-(1-26)

DESCRIPTION OF SAMPLE

Strap

	Material	Colour(s)	
Frame front	Flexible plastic	Matte taupe frame with black closed cell foam lining on the inside rim. There are open panels at the top and bottom of the frame. The panels are covered by black opened-cell foam.	
Hinges	Plastic	Matte taupe	
Strap	Elastomeric	Taupe with clear gel wavy grip strips on the inside	

	Material	Colour(s)	Tint	Туре	Coating
Filters / Oculars	Plastic one piece	Grey	Uniform	Non-polarising	Unknown
Markings	Frame front	Тор	(logo)	Bottom	(datestamp)
	Filters / Oculars	None		1	
	Hinges	None			

		X 3 3 7
Packaging	None	

(logo)

This report may not be published except in full unless permission for the publication of an approved extract has been obtained in writing



SECTION 5 GENERAL REQUIREMENTS

5.1 5.1.1	OPTICAL REQUIREMENTS Optical quality		Pass
5.1.2	Luminous Transmission Transmittance		See below
	Scale Number Luminous transmittance – Nominal (av. of lenses) Minimum (tinted lens)	11.5% 8.5%	U6 Pass
	Maximum (tinted lens)	18%	
	Far-ultraviolet transmittance Maximum	<0.01%	Pass
	Near-ultraviolet transmittance Maximum (luminous trans x0.1)	<0.01%	Pass
	Infrared transmittance Maximum		N/A
	Blue-light transmittance Maximum (luminous trans)		N/A
	Luminous transmittance ratio Minimum	0.99	Pass
	Maximum	1.10	
5.1.3	Haze Maximum	<1.6% 3.0%	Pass
5.1.4	Refractive power of oculars Refractive and astigmatic power Resolving power Prism Prism imbalance		Pass Pass Pass Pass
5.2	PHYSICAL REQUIREMENTS		Pass
5.2.1	Drop ball impact resistance		Pass
5.2.2	Protector acceptance criteria		See clause 6.2.1
5.2.3	Ignition		Pass
5.2.4	Corrosion resistance of metal components		N/A
5.2.5	Minimum coverage area		Pass
5.3	MINIMUM LENS THICKNESS		N/A
5.4	MARKING REQUIREMENTS Eye and face protectors Manufacturer's mark or logo on lenses and frames Standard number Coverage (H-small head sizes) Impact mark Lens type Use		Not present Not present N/A Not present Not present 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.



This document is issued in accordance with NATA's accreditation requirements.

Report Number 12059.1
Page 2 of 4
Checked by

5.5	OTHER REQUIREMENTS	
5.5.1	Goggles	N/A
5.5.1.1	Direct ventilation	N/A
5.5.1.2	Indirect ventilation	N/A
5.5.2	Screen windows and screen lenses	N/A
5.5.3	Welding Protectors	N/A
5.5.3.1	Transmittance of non-lens area	N/A
5.5.3.2	Light tightness	N/A
5.5.4	Frames for replaceable or removable lenses	Not provided
5.5.5	Respiratory products	N/A
5.6	REPLACEABLE LENSES	
5.6.1	Goggles	N/A
5.6.2	Walding belongs and benefit to	
5.6.2	Welding helmets and handshields	N/A
5.7	AFTERMARKET COMPONENTS	N/A
SECTION 6	IMPACT PROTECTOR REQUIREMENTS	
6.1	GENERAL	
6.1.1	Impact rated protectors	See clause 5.4
6.1.2	Frames and shells	Pass
		rass
6.1.3	Lateral (side) coverage	Pass
6.2	IMPACT REQUIREMENTS	
6.2.1	Protector acceptance criteria	See clause 6.2.2-6.2.4
6.2.2	High mass impact	Pass
6.2.3	High velocity impact	Pass
6.2.4	Penetration test (lenses only)	Pass
SECTION 7	OPTICAL RADIATION PROTECTOR	
7.1 7.1.1	TRANSMITTANCE OF LENSES Optional transmittance attributes	
7.1.2	Clear and filter lenses	See clause 5.1.2
7.1.4	Visible light filters	See clause 5.1.2
7.1.5	Variations in luminous transmittance	Pass

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



SECTION 8 DROPLET AND SPLASH, DUST AND FINE DUST PROTECTOR REQUIREMENTS

8.1	DROPLET AND SPLASH HAZARD	
8.1.1	Goggles	Pass
8.1.2	Faceshields	N/A
8.2	DUST HAZARD	N/A
8.3	FINE DUST HAZARD	N/A

These eye protectors DO meet the above requirements of ANSI/ISEA Z87.1-2010, provided they are fully and correctly marked as the standard requires.

The Standard requires the following information to be etched or impressed into these eye protectors:

- a) Manufacturer's mark or logo
- b) Standard number Z87
- c) Impact mark Z87+
- d) Lens type U6
- e) Use D3

Brian Cheng

Authorised Signatory

Thao Ngo

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 Prismatic power Refractive power ±0.005D ±0.03D Scattered light ±0.1% Spectral transmittance ±0.2%

UV transmittance uncertainties comply with EN 168

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

