



# REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. G100766457

Date: September 27, 2012

REPORT NO. 100766457CRT-007

TEST OF SAFETY GLASSES  
MODELS

SPY PRO GREY	SPY PRO GREY MIRRORRED
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RENDERED TO

VICSA SAFETY SA  
PINTOR CICARELLI 683  
8950002 SAN JOAQUIN, CHILE

## DATA REQUESTED

The client requested optical testing to Section 5 of ANSI Z87.1.

## AUTHORIZATION

This test service was authorized by signed quote number 500380131.

## REFERENCE DOCUMENTS:

The following Test Standards were used in part or in total to test each sample:

ANSI Z87.1 2010

American National Standard for Occupational and Educational Personal Eye and Face Protection Devices

ASTM D1003 2007

Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics

## DEVICES SUBMITTED

The samples were received by Intertek in undamaged condition, and were tested as received. The sample designations were 250592-16 through 250592-17.

## DATES OF TESTS

September 13 through September 26, 2012



EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Calibration Date	Calibration Due Date
Optronics Spectroradiometer	OL750D	E288	09/13/12	09/14/12
Gardner Hazemeter	XL211	N328	09/26/12	11/26/12
Extech Hygrothermometer	445703	T1366	10/19/11	10/19/12
Extech Hygrothermometer	445703	T1355	10/29/11	10/29/12
Intertek 100ft Goniometer	NA	N060	08/14/12	08/14/13

TESTS

Section 5.1.1 Optical Quality:

Lenses shall be free of striae, bubbles, waves and other visible defects which would impair their optical quality.

Section 5.1.2 Luminous Transmission:

Clear lenses shall have a luminous transmission of not less than 85%. Clear and Filter lenses shall be labeled in accordance with Table 4a of ANSI Z87.1. Plano and prescription lenses shall comply with Tables 6 – 10 of ANSI Z87.1 where applicable.

Section 5.1.3 Haze:

Clear and plano lenses shall not exhibit more than 3% haze.

Section 5.1.4 Refractive Power, Astigmatism, Resolving Power, Prism and Prism Imbalance:

Lenses shall meet the tolerances for Refractive Power, Astigmatism and Resolving power as specified in Table 1 of ANSI Z87.1. Lenses shall meet the tolerances for Prism and Prism Imbalance as specified in Table 2 of ANSI Z87.1.

Protector	Refractive Power	Astigmatism	Resolving Power
Spectacle	± 0.06 D	≤ 0.06 D	Pattern 20
Goggle	± 0.06 D	≤ 0.06 D	Pattern 20
Faceshield Windows	No Requirement	No Requirement	Pattern 20
Welding Helmet Lenses	± 0.06 D	≤ 0.06 D	Pattern 20

Protector	Prism	Vertical Imbalance	Base In Imbalance	Base Out Imbalance
Spectacle	≤ 0.50 Δ	≤ 0.25 Δ	≤ 0.25 Δ	≤ 0.50 Δ
Goggle	≤ 0.25 Δ	≤ 0.125 Δ	≤ 0.125 Δ	≤ 0.50 Δ
Faceshields	≤ 0.37 Δ	≤ 0.37 Δ	≤ 0.125 Δ	≤ 0.75 Δ
Welding Lenses	≤ 0.50 Δ	≤ 0.25 Δ	≤ 0.25 Δ	≤ 0.75 Δ



**RESULTS OF TEST**

Section 5.1.1 Optical Quality:

Control Number	Model Number	Defects	Notes	Pass/Fail
250592-16	Spy Pro Grey	None	---	Pass
250592-17	Spy Pro Grey Mirrored	None	---	Pass

Section 5.1.2 Luminous Transmission:

Control Number	Model Number	Percent Transmittance		Pass/Fail/NA
		Left Eye	Right Eye	
250592-16	Spy Pro Grey	9.94	10.1	NA
250592-17	Spy Pro Grey Mirrored	13.2	13.7	NA

Section 5.1.3 Haze:

Control Number	Model Number	Percent Haze		Pass/Fail/NA
		Left Eye	Right Eye	
250592-16	Spy Pro Grey	0.83	0.74	Pass
250592-17	Spy Pro Grey Mirrored	1.17	0.85	Pass

Section 5.1.4 Refractive Power, Astigmatism, Resolving Power

Control Number	Model Number	Eye	Refractive Power (diopters)	Astigmatism (diopters)	Resolving Power	Pass/Fail
250592-16	Spy Pro Grey	Left	-0.02	0.04	34	Pass
		Right	-0.02	0.05	34	
250592-17	Spy Pro Grey Mirrored	Left	-0.01	0.05	40	Pass
		Right	-0.01	0.04	40	

Section 5.1.4 Prism and Prism Imbalance

Control Number	Model Number	Eye	Prism ( $\Delta$ )	Vertical Imbalance ( $\Delta$ )	Base in Imbalance ( $\Delta$ )	Base Out Imbalance ( $\Delta$ )	Pass/Fail
250592-16	Spy Pro Grey	Left	0.13	0.06	0.00	0.00	Pass
		Right	0.06				
250592-17	Spy Pro Grey Mirrored	Left	0.09	0.06	0.00	0.00	Pass
		Right	0.13				

Transmittance Ratings

Control Number	Model Number	Eye	Visible Light Transmittance	L-Scale	UV Transmittance (%)		
			(%)		Far UV	Near UV	U-Scale
250592-16	Spy Pro Grey	Left	9.94	L3	0.00	0.00	U6
		Right	10.1				
250592-17	Spy Pro Grey Mirrored	Left	13.2	L3	0.00	0.00	U6
		Right	13.7				

PHOTO OF SAMPLE(S):

SPY PRO GREY



SPY PRO GREY MIRRORED



In Charge Of Tests:



Denis Niggli  
Engineer  
Lighting Division

Report Reviewed By:



David Ellis  
Senior Project Engineer  
Lighting Division