



# REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. G100766457

Date: July 29, 2012

REPORT NO. 100766457CRT-004

## TEST OF SAFETY GLASSES MODELS

TOP GUN CLEAR	TOP GUN GREY	TOP GUN IN-OUT
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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 on June 21, 2012 in undamaged condition, and were tested as received. The sample designations were 250592-09 through 250592-11.

### DATES OF TESTS

July 19 through July 26, 2012



EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Calibration Date	Calibration Due Date
Optronics Spectroradiometer	OL750D	E288	07/20/12	07/21/12
Gardner Hazemeter	XL211	N328	07/18/12	08/18/12
Extech Hygrothermometer	445703	T1357	10/26/11	10/26/12
Extech Hygrothermometer	445703	T1355	10/29/11	10/29/12
Intertek 100ft Goniometer	NA	N060	08/12/11	08/12/12

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
250592-09	Top Gun Clear	None	---	Pass
250592-10	Top Gun Grey	None	---	Pass
250592-11	Top Gun In-Out	None	---	Pass

Section 5.1.2 Luminous Transmission:

Control Number	Model Number	Percent Transmittance		Pass/Fail/NA
		Left Eye	Right Eye	
250592-09	Top Gun Clear	91.2	91.0	Pass
250592-10	Top Gun Grey	13.3	13.4	NA
250592-11	Top Gun In-Out	35.5	36.2	NA

Section 5.1.3 Haze:

Control Number	Model Number	Percent Haze		Pass/Fail/NA
		Left Eye	Right Eye	
250592-09	Top Gun Clear	0.23	0.36	Pass
250592-10	Top Gun Grey	0.73	0.79	Pass
250592-11	Top Gun In-Out	0.46	0.59	Pass

Section 5.1.4 Refractive Power, Astigmatism, Resolving Power

Control Number	Model Number	Eye	Refractive Power (diopeters)	Astigmatism (diopeters)	Resolving Power	Pass/Fail
250592-09	Top Gun Clear	Left	-0.01	0.05	48	Pass
		Right	-0.01	0.05	48	
250592-10	Top Gun Grey	Left	-0.01	0.05	48	Pass
		Right	-0.01	0.05	48	
250592-11	Top Gun In-Out	Left	-0.01	0.05	48	Pass
		Right	-0.01	0.06	48	

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
250592-09	Top Gun Clear	Left	0.13	-0.03	0.00	0.00	Pass
		Right	0.16				
250592-10	Top Gun Grey	Left	0.13	0.03	0.00	0.00	Pass
		Right	0.16				
250592-11	Top Gun In-Out	Left	0.13	0.00	0.00	0.00	Pass
		Right	0.13				



RESULTS OF TEST (continued):

Transmittance Ratings

Control Number	Model Number	Eye	Visible Light	UV Transmittance (%)			U-Scale
			Transmittance (%)	L-Scale	Far UV	Near UV	
250592-09	Top Gun Clear	Left Right	91.2 91.0	Clear	0.00	0.01	U6
250592-10	Top Gun Grey	Left Right	13.3 13.4	L3	0.00	0.00	U6
250592-11	Top Gun In- Out	Left Right	35.5 36.2	L2	0.00	0.01	U6

PHOTO OF SAMPLE(S):

TOP GUN CLEAR



TOP GUN GREY



TOP GUN IN-OUT



In Charge Of Tests:

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