

TEST RESULTS and REPORT

for

Wolf Peak Holdings, LLC

Reclus SR 111AR

by



COLTS Laboratories maintains A2LA accreditation to ISO/IEC 17025 for the tests listed on Certificate # 1612.01. Any tests not included on this certificate have been identified on the appropriate test result page.

Also Certified for testing by the Safety Equipment Institute

Z-WPI083011-01

- Results in this report only relate to the samples analyzed.
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- Unless otherwise requested, test samples will be discarded 21 days from the report date.

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A2LA Accredited-Certificate # 1612.01

Wolf Peak Holdings, LLC
Z-WPI083011-01

SUMMARY
REPORT

Project ID	Test /Model(s)	Results Pass / Fail	Reason	Page
Z-WPI083011-01-01	ANSI Z87.1-2010 High Impact Spectacles - Special Purpose Lens Base Model Reclus SR 111AR Black frame with clear lenses and AR	Pass		1

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Report Summary

Report To:

Wolf Peak Holdings, LLC
1221 West Marshall Way
Layton, UT 84041

Attn: Mark Marshall

Date: Wednesday, September 07, 2011

PROJECT

of Model(s): Reclus SR 111AR
Report of: ANSI Z87.1-2010 High Impact Spectacles -
Special Purpose Lens Base Model
Project ID(s): Z-WPI083011-01-01



Product Description: Black frame with clear lenses and AR

On Tuesday, August 30, 2011, COLTS Laboratories received spectacles : Reclus SR 111AR from Wolf Peak Holdings, LLC. From Tuesday, August 30, 2011 through Wednesday, September 07, 2011 COLTS Laboratories tested these spectacles in accordance with ANSI Z87.1-2010.

Final Conclusion:

The spectacles: Reclus SR 111AR do comply with ANSI Z87.1-2010 for the test(s) performed for ANSI Z87.1-2010 High Impact Spectacles - Special Purpose Lens Base Model.

Please contact us should you have any questions concerning this report.

Respectfully submitted,

COLTS Laboratories

Handwritten signature of Daryl Neely in blue ink.

Daryl Neely
Vice-President & COO

Handwritten signature of John M. Young in blue ink.

John M. Young
President

Report To: Wolf Peak Holdings, LLC

Project No. Z-WPI083011-01-01



A2LA Accredited-Cert .#1612.01

Sample ID:
Reclus SR 111AR

Black frame with clear lenses and AR

Report Date: 9/7/2011

Lab Temp (°C) : 23

Lab Rh : 47

Report of: ANSI Z87.1-2010 High Impact Spectacles - Special Purpose Lens Base Model

Test/Property	ANSI Z87.1-2010 Paragraph	Requirement	Test Results	Acceptance
Optical Quality	5.1.1	When tested in accordance with Section 9.1, protector lenses shall be free of striae, bubbles, waves and other visible defects which would impair their optical quality.	Acceptable	Pass
Refractive Power, Astigmatism, Resolving Power, Prism and Prism Imbalance for Plano Protectors	5.1.4	When tested in accordance with Section 9.4, the tolerance on refractive power, astigmatism and resolving power shall be as indicated in Table 1. Filter lenses of shade 9 or higher are exempt from this testing. When tested in accordance with Section 9.5, the tolerance on prism and prism imbalance shall be as indicated in Table 2. Refractive Power Left ($\pm 0.06D$) Refractive Power Right ($\pm 0.06D$) Astigmatism Left ($\leq 0.06D$) Astigmatism Right ($\leq 0.06D$) Resolving Power Left (Minimum Pattern 20) Resolving Power Right (Minimum Pattern 20) Spectacle Complete Prism Left ($\leq 0.50D$) Spectacle Complete Prism Right ($\leq 0.50D$) Spectacle Vertical Imbalance ($\leq 0.25D$) Spectacle Horizontal Imbalance In/Out (In $\leq 0.25D$; Out $\leq 0.50D$)	+0.04 +0.04 0.04 0.035 24 20 0.158 0.158 0.00 0.10 out	Pass Pass Pass Pass Pass Pass Pass Pass Pass Pass
Physical Requirements	5.2	Protectors shall be free from projections, sharp edges or other defects which are likely to cause discomfort or injury during use.	Acceptable	Pass
Drop Ball Impact Resistance	5.2.1	When tested in accordance with Section 9.6, protector lenses shall not fracture when impacted by a 25.4 mm (1 in.) steel ball when dropped from a height of 127 cm (50 in.). Glass welding filter lenses shall be tested and used in conjunction with a safety plate in order to comply with the impact performance criteria. Sample 1 - Left Eye Sample 2 - Left Eye Sample 3 - Right Eye Sample 4 - Right Eye	Acceptable Acceptable Acceptable Acceptable	Pass Pass Pass Pass



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Test/Property	ANSI Z87.1-2010 Paragraph	Requirement	Test Results	Acceptance
Ignition	5.2.3	When tested in accordance with Section 9.7, protectors shall not ignite or continue to glow once the rod is removed. Each externally exposed material (exclusive of textiles or elastic bands) shall be tested.		
		Lens	Acceptable	Pass
		Front	Acceptable	Pass
		Temple	Acceptable	Pass
		Sideshield		N/A
		Other		N/A
Corrosion Resistance of Metal Components	5.2.4	When tested in accordance with Section 9.8, metal components used in protectors shall be corrosion resistant to the degree that the function of the protector shall not be impaired by the corrosion. Lenses and electrical components are excluded from these requirements.	Acceptable	Pass
Minimum Coverage Area	5.2.5	The eyewire and lens shall cover in plane view an area of not less than 40 mm (1.57 in.) in width and 33 mm (1.30 in.) in height (elliptical) in front of each eye, centered on the geometrical center of the lens. Frames designed for small head sizes shall cover in plane view an area of not less than 34 mm (1.34 in.) in width and 28 mm (1.10 in.) in height (elliptical), centered on the geometrical center of the lens. Frames designed for small head sizes shall be tested on the 54 mm (2.13 in.) PD headform and are permitted to have an eye size, including eyewire thickness, as small as 34 x 28mm (1.34 x 1.10 in.). Frames that are tested using the small headform shall be marked on the frame with the letter "H."	Acceptable	Pass
Minimum Lens Thickness	5.3	The minimum lens thickness for specified protectors shall be those indicated in Table 3. Note 1: No minimum thickness requirement applies to the protector beyond a vertical plane passing through the 90 degree impact point. Note 2: For plano spectacles, no minimum thickness is required for protectors if they meet the requirements of Section 9.11, High Mass Impact Test. Minimum Thickness		N/A



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Test/Property	ANSI Z87.1-2010 Paragraph	Requirement	Test Results	Acceptance
Marking Requirements	5.4	All protectors shall bear the permanent markings in specified locations as shown in Table 4a. Markings shall follow the sequence shown in Table 4b. Markings for lens type and use applications shall be required only when claims for protection against the hazard or indicated use are made by the manufacturer.		
		In addition, the components of frames that are intended for prescription protector use shall be marked for size in accordance with the system described in ANSI Z80.5-2004. Fronts shall be marked with the A-dimension (eye size) and DBL (distance between lenses). Temples shall be marked with their overall length.		
		Lens and Replacement Lens Markings Sequence	Acceptable	Pass
		Mfg Mark or Logo	Acceptable	Pass
		+ Mark	Acceptable	Pass
		Lens Type	Acceptable	Pass
		Spectacle Frame Front Markings Sequence for Products with Replaceable Lenses	Acceptable	Pass
		Mfg Mark or Logo - Frame Front	Acceptable	Pass
		Z87 Mark - Frame Front	Acceptable	Pass
		+ Mark - Frame Front	Acceptable	Pass
		H Mark (Coverage - small head sizes)		N/A
		Spectacle Temple Markings Sequence for Products with Replaceable Lenses	Acceptable	Pass
		Mfg Mark or Logo - At least one temple	Acceptable	Pass
		Z87 Mark - At least one temple	Acceptable	Pass
		+ Mark - At least one temple	Acceptable	Pass
		H Mark (Coverage - small head sizes)		N/A
		Z87 Mark - Both detachable sideshields		N/A
		+ Mark - Both detachable sideshields		N/A
		H Mark (Coverage - small head sizes)		N/A
		Complete Device Markings Sequence (No replaceable parts)		N/A
Mfg Mark or Logo		N/A		
Z87 Mark		N/A		
+ Mark		N/A		
Lens Type		N/A		
Use		N/A		
Frames for Replaceable or Removable Lenses	5.5.4	All frames which can house replaceable or removable lenses shall be supplied with detailed specifications on the required lens bevel design or mounting technique and nominal lens sizing required to conform to ANSI/ISEA Z87.1-2010.		N/A



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Test/Property	ANSI Z87.1-2010 Paragraph	Requirement	Test Results	Acceptance
Aftermarket Components	5.7	All original equipment manufacturers (OEM) and non-OEM aftermarket components not sold with the original device shall be tested assembled with the original complete device in the as worn condition to show compliance with all applicable requirements in Sections 5, 6, 7 and 8. For aftermarket sideshields, the sideshields shall be tested on representative frames for which the product is specified to fit. Documentation listing all devices that the component or accessory (OEM or non-OEM) has been tested and is approved for shall be made available by the manufacturer. Except for automatic darkening filters, replacement welding and goggle filters and lenses that meet the size restrictions specified in Section 5.6 shall be tested on one (1) type of representative frames as needed to verify compliance with applicable requirements in Sections 5, 6, 7 and 8.	Manufacturer requirement	Not testable
Impact Rated Protectors	6.1.1	Impact-rated protectors and replaceable components shall meet the impact requirements in this standard and be marked in accordance with Table 4a and Table 4b.	Acceptable	Pass
Lateral (Side) Coverage	6.1.3	When tested in accordance with Section 9.10, impact rated protectors shall provide continuous lateral coverage (i.e. no openings greater than 1.5 mm (0.06 in.) in diameter) from the vertical plane of the lenses tangential to a point not less than 10 mm (0.394 in.) posterior to the corneal plane and not less than 10 mm (0.394 in.) in height (or 8 mm (0.315 in) for the smaller headform) above and not less than 10 mm (0.394 in.) in height (or 8 mm (0.315 in) for the smaller headform) below the horizontal plane centered on the eyes of the headform. The probe shall not contact the headform within the defined coverage area. (See Annex D).	Acceptable	Pass
High Mass Impact	6.2.2	When tested in accordance with Section 9.11, the complete device shall be capable of resisting an impact from a pointed projectile weighing 500 g (17.6 oz.) dropped from a height of 127 cm (50.0 in.).		
		Left Eye Sample 1	Acceptable	Pass
		Left Eye Sample 2	Acceptable	Pass
		Right Eye Sample 3	Acceptable	Pass
		Right Eye Sample 4	Acceptable	Pass



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Test/Property	ANSI Z87.1-2010 Paragraph	Requirement	Test Results	Acceptance
High Velocity Impact	6.2.3	When tested in accordance with Section 9.12, the complete device shall be capable of resisting impact from a 6.35 mm (0.25 in) diameter steel ball traveling at the velocity specified in Table 5. No contact with the eye of the headform is permitted as a result of impact.		
		Left Eye Center	153 fps	Pass
		Left Eye 30°	153 fps	Pass
		Right Eye Center	151 fps	Pass
		Right Eye 30°	152 fps	Pass
		One Side 90° at 10mm Above (H - 8mm)	153 fps	Pass
		Opposite Side 90° at 10mm Below (H - 8mm)	151 fps	Pass
Penetration Test (lenses only)	6.2.4	When tested in accordance with Section 9.13, lenses for all complete devices shall be capable of resisting penetration by a weighted needle with a total weight of 44.2 gm (1.56 oz.) dropped from a height of 127 cm (50.0 in.).		
		Left Eye Sample 1	Acceptable	Pass
		Left Eye Sample 2	Acceptable	Pass
		Right Eye Sample 3	Acceptable	Pass
		Right Eye Sample 4	Acceptable	Pass
Special Purpose Lenses	Table 10	Transmittance Requirements for Special Purpose Lenses		
		Tinted Lens - Left Eye (8% - 85%)	72.97%	Pass
		Tinted Lens - Right Eye (8% - 85%)	72.51%	Pass
		Tinted Lens - Ratio (0.90 - 1.10)	1.006	Pass
		Extra Dark Lens - Left Eye (0.2% - 8%)		N/A
		Extra Dark Lens - Right Eye (0.2% - 8%)		N/A
	Extra Dark Lens - Ratio (0.80 - 1.20)		N/A	