

Test Report T6288-01-2 Issue 1 MIL-PRF-31013 (Ballistic Resistance) Bolle Safety 8231 Rogue Spectacles 27 April 2011



Approved by:

Prepared by:

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Objective:

Contract testing to MIL-PRF-31013 (25 April 1996) "Performance Specification-Spectacles, Special Protective Eyewear Cylindrical Systems (SPECS)".

Clause 3.5.1.1 Ballistics resistance

Samples:

8231 Rogue Spectacles

Lens Color	Frame Color	Quantity	Sample ID
Clear	Black	30	8A
Smoke	Black	30	8B
Yellow	Black	30	8C

Date submitted: 04 April 2011

Equipment:

- 1. Pneumatic Air Gun.
- 2. Propellant, Nitrogen.
- 3. Fragment Simulating Projectiles (FSP), 0.15 caliber, 5.8 grain, 4340 steel, Hardness 30 +/- 2 Rockwell C.
- 4. Oehler Research Precision Ballistic Chronographs, two sets of screens with 1' spacing between start and stop. (Set 1: stop screen ~16.0" from sample, Set 2: stop screen ~ 12.5" from sample)
- 5. Ballistic Alderson 50th percentile headform with 0.002 inch witness sheet, nominally 2" behind sample.

Procedures:

Testing protocols in accord with good laboratory practice were employed for all tests.

All tests were conducted in a standard laboratory atmosphere unless otherwise specified.

Ten samples were selected at random from the quantity provided.

Samples were mounted on headform and impacted with a 0.15 caliber projectile a velocity of 640 to 660 ft/s. One impact per sample, normal to the front curve, coincident with either the right or left eye. Left and right impact locations were to the visual centers (a point centered on the horizontal center line and 32mm from the vertical center line).

Any velocity loss of the projectile is considered to be negligible with respect to the geometries of the test bench.

The result was considered to be a failure if the aluminum foil witness sheet was punctured or if the lens cracked through its entire thickness.

Summary:

Date tested: 19 April 2011

The samples as assessed met the ballistic resistance requirements for spectacles.





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Results:

Sample ID	Location	Velocity (ft/s)		Pass	Fail
		Set 1	Set 2	Pass	raii
Clear					
8A-21	Right	654	653	X	
8A-22	Right	649	657	X	
8A-23	Right	655	654	X	
8A-24	Right	656	655	X	
8A-25	Right	652	650	X	
8A-26	Left	654	653	X	
8A-27	Left	656	655	X	
8A-28	Left	647	646	X	
8A-29	Left	655	653	X	
8A-30	Left	657	655	X	
Smoke	<u>.</u>				
8B-21	Right	652	651	X	
8B-22	Right	653	652	X	
8B-23	Right	652	651	X	
8B-24	Right	651	649	X	
8B-25	Right	649	647	X	
8B-26	Left	654	653	X	
8B-27	Left	651	650	X	
8B-28	Left	649	648	X	
8B-29	Left	658	657	X	
8B-30	Left	652	651	X	
Yellow	•		•		1
8C-21	Right	652	651	X	
8C-22	Right	657	656	X	
8C-23	Right	650	650	X	
8C-24	Right	654	653	X	
8C-25	Right	649	648	X	
8C-26	Left	649	648	X	
8C-27	Left	651	650	X	
8C-28	Left	648	646	X	
8C-29	Left	654	653	X	
8C-30	Left	647	646	X	





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Sample Photographs:







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