



2873 22nd St SE
Salem, OR 97302

Tel: 503.540.8114
Fax: 503.362.5597
www.oregonbl.com
ISO/IEC 17025:2017 Accredited Laboratory
NVLAP Code: 200826-0

September 19, 2023

Caliber Armor LLC
1421 Seldina Ave.
Louisville, KY 40213
ATTN: Kevin Strnatka

Dear Mr. Strnatka:

In accordance with your instructions, Oregon Ballistic Laboratories conducted Ballistic Resistance (V₀) testing on one sample lot.

The samples were tested in accordance with NIJ-STD-0101.07 (draft) Level RF2 (abbreviated) (modified) – Special Threat and DEA (modified) in an indoor range with the muzzle of the test barrel mounted 50 feet away from the target and positioned to produce 0-degree obliquity impacts. Four infrared light screens, in conjunction with time-based frequency counters, were positioned such that projectile velocity was measured 8.25 feet from the target. Penetrations were determined by examination of a 0.020-inch 2024-T3 aluminum mounted 6-inches and parallel behind the test sample. Results for all testing performed for this purpose are summarized in the following table.

Test Sample			Ballistic Threat			Results	
OBL No.	Model:	Weight (lbs.)	Projectile	Shots	Velocity (fps)	Penetrations	Pass/Fail
35364	19-CSU-15X25	20.93	.223 REM TBSP	1	2601	0	<u>PASS</u>
			M193 55gr.	1	3245	0	<u>PASS</u>
			M855 62gr.	1	3111	0	<u>PASS</u>
			Type 56 MSC 122gr.	1	2403	0	<u>PASS</u>
			LPS 148gr.	1	2793	0	<u>PASS</u>
36361	19-CSU-12X18	11.04	M80 Steel	1	2766	0	<u>PASS</u>
			.308 PSPB	1	2601	0	<u>PASS</u>
			M855 A1	1	2821	0	<u>PASS</u>

*Data shown in the table represents fair impacts only.

This report pertains only to the samples tested and may not be modified or edited in any way. This report may not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any federal government agency. Samples will be maintained at Oregon Ballistic Laboratories for 30 days and discarded unless other instructions are received. If you have any further questions or concerns, don't hesitate to contact us.

Darius Nuttbrock
Ballistic Test Director
Oregon Ballistic Laboratories
503.689.5134
Email: dnuttbrock@oregonbl.com



BALLISTIC RESISTANCE TEST - V₀

Customer: Caliber Armor LLC
 OBL ID#: 35364 & 36361
 Date Rcv'd: 5/9/2023
 Test Date: 6/22/2023 & 9/14/2023
 Purchase Order:

TEST SAMPLE		Size (in.):			
Serial No.:	04156237-001	15 x 25			
Model No.:	19-CSU-15X25 & 19-CSU-12X18	Weight (lb.):	20.93		
Lot No.:	NL0415/X6237	Thickness:	0.385	0.375	0.367 0.377
Plies:	N/A	Avg. Thk. (in):	0.376		
Description:	RF2 Ballistic Shield Multi-Threat				

RANGE SET-UP		Range #:		Pre Test:	
Range to Target:	50 ft.	2		CLAY CALIBRATION NOT REQUIRED	
Screen Dist. Vel. 1 (ft.):	5	Temperature:	69.5 °F	Clay Drops (mm):	
Screen Dist. Vel. 2 (ft.):	4	Bar. Pressure:	29.76 in. Hg	Drop Avg (mm):	
Screen 4 to target (ft):	N/A	Rel. Humidity:	46.0 %	Clay Temp °F:	
Primary Vel. Location:	8.25 ft. from target	Sample Temp.	Amb. °F	Clay Box #:	
Striking Velocity:	No	Recorder:	Jason Stone	Post Test:	
Target to Witness:	6 in.	Gunner:	Nathan Myers	Clay Drops (mm):	
Witness Panel:	0.020" 2024-T3 Alum.			Drop Avg (mm):	
Backing Material:	N/A			Clay Temp °F:	
Obliquity:	0 Degrees				
Barrel:	5.56mm NATO/1:7/30"				

AMMUNITION	
Projectile:	.223 REM. 62gr. Bonded SP
Powder:	IMR 4227

STANDARDS / PROCEDURES		Required Velocity:
NIJ-STD-0101.07 (draft) RF2 (abbrev) (mod) - Special Threat		2600 fps ± 50 fps
DEA modified		

SHOT NO.	PROJECTILE WT. (gr.)	POWDER WT. (gr.)	TIME 1 μs (10 ⁻⁶)	TIME 2 μs (10 ⁻⁶)	VELOCITY 1 ft/s	VELOCITY 2 ft/s	AVERAGE VELOCITY	PENET. P/C	OBLIQUITY	CALIPER BFD	NOTES
1	62.0	15.5	1926	1535	2596	2606	2601	P	0°		.223 REM TBSP
2	55.1	19.9	1542	1232	3243	3247	3245	P	0°		55gr. M193 @ 3250fps +/- 30 / IMR 4227 / TL
3	62.8	20.0	1608	1285	3109	3113	3111	P	0°		62gr. M855 @ 3115fps +/- 30 / IMR 4227 / TR
4	62.0	17.8	1775	1416	2817	2825	2821	P	0°		62gr. M855A1 @ 2800fps +/- 30 / Center / Tested 9/14/23
5	122.2	22.8	2085	1662	2398	2407	2403	P	0°		122gr. Type 56 MSC @ 2400fps +/- 30 / IMR 4227 / TL Bolt
6	147.1	37.5	1809	1445	2764	2768	2766	P	0°		148gr. M80 Steel @ 2780fps +/- 30 / Top Bolt / Tested 9/14/23
7	150.0	35.4	1925	1536	2597	2604	2601	P	0°		150gr. 308 PSPB @ 2600fps +/- 50 / Bottom Bolt / Tested 9/14/23
8	148.0	39.9	1792	1431	2790	2795	2793	P	0°		148gr. LPS @ 2800fps +/- 30 / N130 / BC Bolt

REMARKS:
 P=Partial Penetration
 C=Complete Penetration
 UH=Unfair Hit
 Projectile Yaw Check: <5° for all velocity shots

TEST RESULTS:
 Test sample satisfied the ballistic requirements given.

FOOTNOTES:

This report pertains only to the samples tested and must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.