

, H.P. White Laboratory, Inc.

An Intertek Company

Ballistic Resistance – Test Report

Client:	Caliber Armor 1421 Selinda Ave Louisville, KY 40213
Report date:	25 November 2019
Job number:	000009810A
Test procedure and supporting documentation:	Per Customer Instructions NIJ-STD-0101.07 DRAFT (MODIFIED)
Sample receipt, identification information, and disposition:	The sample(s) were received on 4 November 2019 and 18 November 2019 . Sample item identification and description details are provided on the attached data record(s). The test sample(s) were inspected prior to testing and no anomalies were discovered. Sample(s) will be returned or discarded per customer instructions. H.P. White will only hold sample(s) as required by specific test protocols.
Test date(s) and location:	Testing commenced on 7 November 2019 , at the H.P. White Laboratory, Inc. facilities located at 3114 Scarboro Road, Street, Maryland. Testing concluded on 19 November 2019 .
Report prepared by:	Ashley Gowland, Customer Operations Coordinator
Report reviewed by:	Wesley Mason, Manager of Technical Operations - Hard Armor
Revision number and date:	NA
Supplement to report:	NA
Test data transmittal method and storage location:	This test report and test data were transmitted via email in a manner compliant with ISO 17025 requirements. Permanent electronic and hardcopy files are maintained in accordance with HPWLI data storage policy on data storage systems, filed by job number.
Disclaimer:	Testing was performed on sample(s) provided by the client. H.P. White Laboratory, Inc. holds no responsibility for sample selection methods. This report is based on data obtained from testing only the sample(s) submitted and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality or performance of any other items of the same, or similar, design. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. This testing was performed by H.P. White Laboratory, Inc. to client specification, and the test results are the property of the client, who holds all rights of reproduction or publication of this report and related test data.
Destination control statement:	This document may contain items controlled by the U.S. government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

Test Procedures

Ballistic Resistance Testing: All testing was conducted on an indoor range at ambient conditions, in accordance with your instructions and the modified provisions of NIJ-STD-0101.07, DRAFT. Testing was conducted using caliber 7.62 x 39mm Surrogate, 123 grain, 5.56mm, M855 BT, 62 grain, 7.62 x 51mm, M80 Ball, 149 grain, and 5.56mm, M193, 56 grain ammunition. The test sample(s) were positioned 25.00 feet from the muzzle of the barrel to produce zero (0°) degree obliquity impacts. Photoelectric infrared screens were located at 10.20 feet and 15.53 feet which, in conjunction with electronic chronographs, were used to compute bullet velocities at 12.86 feet forward of the muzzle. The striking velocity was computed using standard drag formulas. Penetrations were determined by visual examination of the 5.5-inch-thick clay backing material witness plate. Table I provides a summary of information on the attached data record(s).

Table I: Ballistic Resistance, Summary of Results

Sample No.	Thickness	Weight (lbs.)	Conditioning	Caliber	Obliquity	Shots	Velocity (fps)		Penetrations	Deformations (mm)	
oumpie noi	(in)	(in) (degri		(degrees°)	0.1010	Max	Min		Max	Min	
14646- 00000056	NA	8.57	AMBIENT	7.62 x 39mm	0	6	2405	2367	0	9.87	7.61
14646- 00000058	NA	8.60	AMBIENT	5.56mm, M855	0	6	3126	3096	0	5.76	1.77
14646- 00000059	NA	8.80	AMBIENT	7.62 x 51mm, M80	0	6	2772	2751	0	24.87	12.72
14646- 00000070	NA	8.78	AMBIENT	5.56mm, M193	0	6	3174	3134	0	12.31	1.21
(a) See indiv	vidual data rec	cord(s) for spe	cific footnotes	/remarks							

Report prepared by:

Ashley Gouland

Ashley Gowland Customer Operations Coordinator

Report reviewed by:

Wesley Mason Manager of Technical Operations - Hard Armor



Protection, Resistance to Penetration, $V_{\rm 0}\,RTP$

Job No: 9810

An Intertek Company

Client: 7434: Caliber Armor Test Date: 11/7/2019

Manufacturer: Caliber Armor	Serial Number: 14646-0000056	Date Rec'd: 11/4/2019	
Size: 10 x 12 in.	Weight: 8.57 lbs.		
Protection Level: RF2	Condition: Ambient		
Description: 2 - AR550 Panel			
Model: 19-AR550-1012-SPC, L	ot Number: N14646		
SET-UP			
Shot Spacing: NIJ-STD-0101.07	Muzzle to Screen 1 (ft.): 10.20	Range No: 1	
Witness Panel: N/A	Distance 1-4 (ft.): 5.33	Temp (°F): 67	
Obliquity: 0°	Distance 2-3 (ft.): 4.64	BP (in. Hg): 30.26	
Backing Material: 5.5" Clay/Plywood	Screen 4 to Target (ft.): 9.47	RH%: 47	
	Muzzle to Target (ft.): 25.00	Barrel No/Gun: 7.62x39 / R1	
	Target to Witness ():	Gunner: Ches/Chronister	
	Velocity Midpoint: 12.86 ft. From Muzzle	Recorder: Skrocki	
AMMUNITION		<u>CLAY</u>	
Projectile: 7.62x39mm Surrogate	Nominal Grain Weight: 123 gr.	Block No: R1 B3	Time of Drops
Powder: IMR 4227	Projectile Lot No: HPW-8307	Temp (°F): 104	
APPLICABLE STANDARDS OR PRO	CEDURES	<u>Clay Drops (mm.)</u>	
(1): NIJ-STD-0101.07 DRAFT (MOI	DIFIED)	1 27.93	
(2):		2 24.38	
(3):		3 26.04	
Remarks	Footnotes	V₀ Summary:	
· All Yaw measured less than 5 degrees	a: SHOT IMPACTED TOO CLOSE TO EDGE	Intended Velocity (ft/s): 2380	
		No. of Shots: 6	

	(µs	sec)			Velocity Me	asurements							
Shot No:			v	ı1	V	2	AVG V _I		Shot Angle	Results	BFD (mm)	Yaw	Footnotes
	Time 1	Time 2	ft/s	m/s	ft/s	m/s	ft/s	m/s					
1	2223	1939	2398	730.8	2393	729.4	2395	730.1	0°	PP	7.61	Good	
2	2215	1931	2406	733.4	2403	732.4	2405	732.9	0°	PP	7.80	Good	а
3	2232	1949	2388	727.9	2381	725.6	2384	726.8	0°	PP	9.87	Good	
4	2243	1957	2376	724.3	2371	722.7	2374	723.5	0°	PP	7.76	Good	
5	2249	1963	2370	722.4	2364	720.5	2367	721.4	0°	PP		Good	
6	2234	1951	2386	727.2	2378	724.9	2382	726.1	0°	PP		Good	



Protection, Resistance to Penetration, V_0 RTP

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Client: 7434: Caliber Armor Test Date: 11/7/2019

Manufacturer: Caliber Armor Size: 10 x 12 in. Protection Level: RF2 Description: 4 - AR550 Model: 19-AR550-1012-SPC, Lot Number: N14646

Job No: 9810

Serial Number: 14646-00000058 Weight: 8.6 lbs. Condition: Ambient Date Rec'd: 11/4/2019

Domarka	Eastnotes		
(3):		3 25.11	
(2):		2 24.58	
(1): NIJ-STD-0101.07 DRAFT (M0	ODIFIED)	1 24.31	
APPLICABLE STANDARDS OR PRO	DCEDURES	Clay Drops (mm.)	
Powder: N120	Projectile Lot No: HPW-0028	Temp (°F): 102.3	
Projectile: 5.56mm M855 BT	Nominal Grain Weight: 62 gr.	Block No: R1 B2	Time of Drops
AMMUNITION		<u>CLAY</u>	
	Velocity Midpoint: 12.86 ft. From Muzzle	Recorder: Skrocki	
	Target to Witness ():	Gunner: Ches/Chronister	
	Muzzle to Target (ft.): 25.00	Barrel No/Gun: .223 / R1	
Backing Material: 5.5" Clay/Plywood	Screen 4 to Target (ft.): 9.47	RH% : 47	
Obliquity: 0°	Distance 2-3 (ft.): 4.64	BP (in. Hg): 30.26	
Witness Panel: N/A	Distance 1-4 (ft.): 5.33	Temp (°F) : 67	
Shot Spacing: NIJ-STD-0101.07	Muzzle to Screen 1 (ft.): 10.20	Range No: 1	
<u>SET-UP</u>			

<u>Remarks</u>	Footnotes	V ₀ Summary:
1: All Yaw measured less than 5 degrees		Intended Velocity (ft/s): 3115
		No. of Shots: 6
		1 1

	(µs	ec)			Velocity Me	asurements							
Shot No:	Time	Time 2	V	₁ 1	V	2	AV	G V _I	Shot Angle	Results	BFD (mm)	Yaw	Footnotes
	Time T	Time 2	ft/s	m/s	ft/s	m/s	ft/s	m/s					
1	1715	1494	3108	947.3	3106	946.6	3107	947.0	0°	PP	2.19	Good	
2	1703	1486	3130	954.0	3122	951.7	3126	952.8	0°	PP	1.77	Good	
3	1718	1499	3102	945.6	3095	943.5	3099	944.6	0°	PP	5.76	Good	
4	1710	1491	3117	950.0	3112	948.5	3114	949.3	0°	PP	4.43	Good	
5	1709	1491	3119	950.6	3112	948.5	3115	949.6	0°	PP		Good	
6	1720	1500	3099	944.5	3093	942.8	3096	943.7	0°	PP		Good	



Protection, Resistance to Penetration, V₀ RTP

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RH%: 47

Job No: 9810

Client: 7434: Caliber Armor Test Date: 11/7/2019

Serial Number: 14646-00000059 Manufacturer: Caliber Armor Date Rec'd: 11/4/2019 Size: 10 x 12 in. Weight: 8.8 lbs. Protection Level: RF2 Condition: Ambient Description: 1 - AR550 Model: 19-AR550-1012-SPC, Lot Number: N14646 SET-UP Shot Spacing: NIJ-STD-0101.07 Muzzle to Screen 1 (ft.): 10.20 Range No: 1 Witness Panel: N/A Temp (°F): 67 Distance 1-4 (ft.): 5.33 Distance 2-3 (ft.): 4.64 BP (in. Hg): 30.26 **Obliquity:** 0° Backing Material: 5.5" Clay/Plywood Screen 4 to Target (ft.): 9.47 Muzzle to Target (ft.): 25.00 Barrel No/Gun: .308 / R1 Target to Witness (): Gunner: Ches/Chronister

	Velocity Midpoint: 12.86 ft. From Muzzle	Recorder: Skrocki	
AMMUNITION		CLAY	
Projectile: 7.62x51mm M80 Ball	Nominal Grain Weight: 149 gr.	Block No: R1 B1	Time of Drops
Powder: N140	Projectile Lot No: HPW-M80SJ-01	Temp (°F): 103.8	
APPLICABLE STANDARDS OR PROCEDU	JRES	Clay Drops (mm.)	
(1): NIJ-STD-0101.07 DRAFT (MODIFIED))	1 26.92	
(2):		2 25.38	
(3):		3 24.22	

<u>Remarks</u>	Footnotes	V ₀ Summary:
1: All Yaw measured less than 5 degrees		Intended Velocity (ft/s): 2780
		No. of Shots: 6

	(µs	ec)			Velocity Me	asurements							
Shot No:	Time 1	Time 2	V	1	V	2	AV	G V _I	Shot Angle	Results	BFD (mm)	Yaw	Footnotes
	Time T	Time 2	ft/s	m/s	ft/s	m/s	ft/s	m/s					
1	1932	1686	2759	840.9	2752	838.8	2755	839.9	0°	PP	12.72	Good	
2	1920	1676	2776	846.1	2768	843.8	2772	845.0	0°	PP	20.15	Good	
3	1935	1689	2755	839.6	2747	837.3	2751	838.5	0°	PP	24.87	Good	
4	1924	1680	2770	844.4	2762	841.8	2766	843.1	0°	PP	23.22	Good	
5	1921	1676	2775	845.7	2768	843.8	2772	844.8	0°	PP		Good	
6	1922	1678	2773	845.3	2765	842.8	2769	844.0	0°	PP		Good	



Protection, Resistance to Penetration, V₀ RTP

An Intertek Company

Job No: 9810

Client: 7434: Caliber Armor

Test Date: 11/19/2019

Manufacturer:	Caliber Armo	or			Se	erial Number:	14646-00000	0070		Date Rec'd:	11/18/2019		
Size:	10 x 12 in.					Weight:	8.78 lbs.						
Protection Level:	RF2					Condition:	Ambient						
Description:	AR550 PAN	EL											
	Model: 19-A	R550-1012-S	SPC, Lot Num	ber: N14646									
SET-UP													
Shot Spacing:	NIJ-STD-010	01.07			Muzzle to \$	Screen 1 (ft.):	10.20			Range No:	1		
Witness Panel:	N/A				Dist	ance 1-4 (ft.):	5.33			Temp (°F):	65		
Obliquity:	0°				Dist	ance 2-3 (ft.):	4.64			BP (in. Hg):	29.81		
Backing Material:	5.5" Clay/Ply	wood			Screen 4 t	o Target (ft.):	9.47			RH%:	50		
					Muzzle t	o Target (ft.):	25.00		Ba	arrel No/Gun:	.223 / R1		
					Target	to Witness ():				Gunner:	Ches/Chronister		
					Veloc	ity Midpoint:	12.86 ft. Fror	m Muzzle		Recorder:	Skrocki		
AMMUNITION										CLAY			
Projectile:	5.56mm M19	93 BT			Nominal C	Grain Weight:	56 gr.			Block No:	R1 B1		Time of Drops
Powder:	N120				Proje	ectile Lot No:	HPW-0078			Temp (°F):	101.6		
APPLICABLE	STANDA		PROCEDI	JRES						Clav Drop	s (mm.)		
(1):	NIJ-STD-010	01.07 DRAFT	(MODIFIED)						1	25.98		
(2):			(-							2	24.55		
(3):										3	24.91		
(-)													
Remarks				Footnote	s				V₀ Summ	ary:			
1. All Yaw measure	d less than 5	dearees							Intended	Velocity (ft/s).	3150		
										No of Shots:	6		
											-		
	(µз	ec)	1		Velocity Me	easurements							
Shot No:	(μs	ec)		/ ₁ 1	Velocity M	easurements ′ ₁ 2	AV	G Vi	Shot Angle	Results	BFD (mm)	Yaw	Footnotes
Shot No:	(µs Time 1	ec) Time 2	ft/s	/ ₁ 1 m/s	Velocity M Velocity M	easurements / ₁ 2 m/s	AV ft/s	G V ₁	Shot Angle	Results	BFD (mm)	Yaw	Footnotes
Shot No:	(µs Time 1 1678	ec) Time 2 1463	ft/s 3176	/ ₁ 1 m/s 968.2	Velocity Mo V ft/s 3172	easurements /12 m/s 966.7	AV ft/s 3174	G V ₁ <u>m/s</u> 967.4	Shot Angle	Results	BFD (mm) 1.21	Yaw Good	Footnotes
Shot No: 1 2	(µs Time 1 1678 1690	ec) Time 2 1463 1474	ft/s 3176 3154	/,1 m/s 968.2 961.3	Velocity Me Velocity Me ft/s 3172 3148	easurements /1 2 m/s 966.7 959.5	AV ft/s 3174 3151	G V ₁ m/s 967.4 960.4	Shot Angle	Results PP PP	BFD (mm) 1.21 12.31	Yaw Good Good	Footnotes
Shot No: 1 2 3	(µs Time 1 1678 1690 1699	Time 2 1463 1474 1482	ft/s 3176 3154 3137	/11 m/s 968.2 961.3 956.2	Velocity Mo ft/s 3172 3148 3131	easurements 1/2 966.7 959.5 954.3	AV ft/s 3174 3151 3134	G V ₁ m/s 967.4 960.4 955.2	Shot Angle 0° 0° 0°	Results PP PP PP	BFD (mm) 1.21 12.31 5.61	Yaw Good Good Good	Footnotes
Shot No: 1 2 3 4	(µs Time 1 1678 1690 1699 1695	Time 2 1463 1474 1482 1478	ft/s 3176 3154 3137 3145	n/1 m/s 968.2 961.3 956.2 958.5	Velocity Mo ft/s 3172 3148 3131 3139	easurements 1 2 966.7 959.5 954.3 956.9	AV ft/s 3174 3151 3134 3142	G V ₁ m/s 967.4 960.4 955.2 957.7	Shot Angle 0° 0° 0°	Results PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5	(µs Time 1 1678 1690 1699 1695 1698	Time 2 1463 1474 1482 1478 1481	ft/s 3176 3154 3137 3145 3139	/11 m/s 968.2 961.3 956.2 958.5 956.8	Velocity Mo ft/s 3172 3148 3131 3139 3133	easurements 7 2 966.7 959.5 954.3 956.9 954.9	AV ft/s 3174 3151 3134 3142 3136	G V ₁ m/s 967.4 955.2 957.7 955.9	Shot Angle 0° 0° 0° 0° 0° 0°	Results PP PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5 6 	(µs Time 1 1678 1690 1699 1695 1698 1691	Time 2 1463 1474 1482 1478 1481 1475	ft/s 3176 3154 3137 3145 3139 3152	/11 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Mo ft/s 3172 3148 3131 3139 3133 3146	easurements 7 2 966.7 959.5 954.3 956.9 954.9 958.8	AV ft/s 3174 3151 3134 3142 3136 3149	G V _I m/s 967.4 955.2 957.7 955.9 959.8	Shot Angle 0° 0° 0° 0° 0° 0° 0° 0° 0°	Results PP PP PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5 6	(µs Time 1 1678 1690 1699 1695 1698 1691	Time 2 1463 1474 1482 1478 1481 1475	ft/s 3176 3154 3137 3145 3139 3152	n/1 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Mo ft/s 3172 3148 3131 3139 3133 3146	easurements 7/2 966.7 959.5 954.3 956.9 954.9 958.8	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ <u>m/s</u> 967.4 960.4 955.2 957.7 955.9 959.8	Shot Angle 0° 0° 0° 0° 0° 0° 0° 0° 0°	Results PP PP PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5 6	(µs Time 1 1678 1690 1699 1695 1698 1691	ec) Time 2 1463 1474 1482 1478 1481 1475	ft/s 3176 3154 3137 3145 3139 3152	n/1 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Mo ft/s 3172 3148 3131 3139 3133 3146	easurements 7; 2 966.7 959.5 954.3 956.9 954.9 958.8	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ <u>m/s</u> 967.4 960.4 955.2 957.7 955.9 959.8	Shot Angle 0° 0° 0° 0° 0° 0° 0° 0° 0° 0°	Results PP PP PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5 6 	(µs Time 1 1678 1690 1699 1695 1695 1691	ec) Time 2 1463 1474 1482 1478 1481 1475	ft/s 3176 3154 3137 3145 3139 3152	n/1 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Mo ft/s 3172 3148 3131 3139 3133 3146	easurements 7, 2 966.7 959.5 954.3 956.9 954.9 958.8	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ <u>m/s</u> 967.4 960.4 955.2 957.7 955.9 959.8	Shot Angle 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0'	Results PP PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5 6 	(µs Time 1 1678 1690 1699 1695 1695 1698 1691	Time 2 1463 1474 1482 1478 1481 1475	ft/s 3176 3154 3137 3145 3139 3152	n/1 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Mo ft/s 3172 3148 3131 3139 3133 3146	easurements 'i 2 966.7 959.5 954.3 956.9 954.9 958.8	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ 967.4 967.4 955.2 957.7 955.9 959.8	Shot Angle 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0'	Results PP PP PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58 	Yaw Good Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5 6 	(µs Time 1 1678 1690 1699 1695 1698 1691	Time 2 1463 1474 1482 1478 1481 1475	ft/s 3176 3154 3137 3145 3139 3152	7,1 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Mo ft/s 3172 3148 3131 3139 3133 3146	easurements '1 2 m/s 966.7 959.5 954.3 956.9 954.9 958.8 0 0 0 0 0 0 0 0 0 0 0 0 0	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ 967.4 967.4 955.2 957.7 955.9 959.8	Shot Angle 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0'	Results PP PP PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5 6 	(µs Time 1 1678 1690 1699 1695 1698 1691	Time 2 1463 1474 1482 1478 1481 1475	ft/s 3176 3154 3137 3145 3139 3152	7,1 m/s 968.2 961.3 956.2 956.8 960.7	Velocity Mu ft/s 3172 3148 3131 3139 3133 3146	easurements m/s 966.7 959.5 954.3 956.9 954.9 958.8 0 0 0 0 0 0 0 0 0 0 0 0 0	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ 967.4 967.4 955.2 957.7 955.9 959.8	Shot Angle 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0'	Results PP PP PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5 6 	(µs Time 1 1678 1690 1699 1695 1698 1691	ec) Time 2 1463 1474 1482 1478 1481 1475 	ft/s 3176 3154 3137 3145 3139 3152	/,1 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Mo ft/s 3172 3148 3131 3139 3133 3146	asurements n/s 966.7 959.5 954.3 956.9 954.9 958.8 □ □ □ □ □ □ □ □ □ □ □ □ □	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ 967.4 960.4 955.2 955.7 955.9 959.8	Shot Angle 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0' 0'	Results PP PP PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5 6 	(µs Time 1 1678 1690 1699 1695 1698 1691	ec) Time 2 1463 1474 1482 1478 1481 1475	ft/s 3176 3154 3137 3145 3139 3152	7,1 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Mo ft/s 3172 3148 3131 3139 3133 3146	easurements 7 2 m/s 966.7 959.5 954.3 956.9 954.9 958.8 	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ m/s 967.4 955.2 957.7 955.9 959.8	Shot Angle 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0°	Results PP PP PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5 6	(µs Time 1 1678 1690 1699 1695 1698 1691	ec) Time 2 1463 1474 1482 1478 1481 1475	ft/s 3176 3154 3137 3145 3139 3152 	n/1 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Ma ft/s 3172 3148 3131 3139 3133 3146 	easurements 12 m/s 966.7 959.5 954.3 956.9 954.9 958.8 	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ m/s 967.4 960.4 955.2 957.7 955.9 959.8	Shot Angle 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0°	Results PP PP PP PP PP PP PP	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good	Footnotes
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Shot No: 1 2 3 4 5 6 	(µs Time 1 1678 1690 1699 1695 1698 1691	eec) Time 2 1463 1474 1482 1478 1481 1475 	ft/s 3176 3154 3137 3145 3139 3152 	/,1 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Me ft/s 3172 3148 3131 3139 3133 3146 	Pasurements 1 2 m/s 966.7 959.5 954.3 956.9 954.9 958.8	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ m/s 967.4 955.2 955.7 955.9 959.8	Shot Angle 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0°	Results PP PP PP PP PP PP Image: Comparison of the second secon	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good	Footnotes
Shot No: 1 2 3 4 5 6 	(µs Time 1 1678 1690 1699 1695 1698 1691	rec) Time 2 1463 1474 1482 1478 1481 1475 	ft/s 3176 3154 3137 3145 3139 3152	/11 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Me ft/s 3172 3148 3131 3139 3133 3146 	Pasurements 1 2 m/s 966.7 959.5 954.3 956.9 954.9 958.8	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ m/s 967.4 955.2 957.7 955.9 959.8	Shot Angle 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0°	Results PP PP PP PP PP PP Image: Comparison of the second secon	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good Good Good Goo	Footnotes
Shot No: 1 2 3 4 5 6	(µs	rec) Time 2 1463 1474 1482 1478 1481 1475 	ft/s 3176 3154 3137 3145 3139 3152	/11 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Mo ft/s 3172 3148 3131 3139 3133 3146	Pasurements 7 2 m/s 966.7 959.5 954.3 956.9 954.9 958.8	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ m/s 967.4 955.2 957.7 955.9 959.8	Shot Angle 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0°	Results PP PP PP PP PP PP Image: Second Se	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good Good	Footnotes
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Shot No: 1 2 3 4 5 6	(µs	ec) Time 2 1463 1474 1482 1478 1481 1475 	ft/s 3176 3154 3137 3145 3139 3152	/,1 m/s 968.2 961.3 956.2 958.5 956.8 960.7	Velocity Mo ft/s 3172 3148 3131 3139 3133 3146	Pasurements 7 2 m/s 966.7 959.5 954.3 956.9 954.9 958.8	AV ft/s 3174 3151 3134 3142 3136 3149	G V ₁ m/s 967.4 955.2 957.7 955.9 959.8	Shot Angle 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0°	Results PP PP PP PP PP PP Image: Second Se	BFD (mm) 1.21 12.31 5.61 8.58	Yaw Good Good Good Good Good Good Good Goo	Footnotes