

BALLISTIC RESISTANCE TEST

Chesapeake Testing

4603B Compass Point Road
Belcamp, MD 21017

Client: Leading Technology Composites, Inc.
Job No.: 2025-065
Test Date: 3/1/2012

Test Panel Description: Rigid armor panel, Part No.: 22620

Manufacturer: Leading Technology Composites, Inc. Sample No.: LTC-2

Size: 20.00 x 20.00 in	Heat No.: NA	Date Received: 3/1/2012
Thickness: 0.590 in; 0.592 in; 0.598 in; 0.615 in	Weight: 8.38 lbs	Via: Hand Carried
Avg. Thick: 0.599 in	Hardness: NA	Returned: Hand Carried
	Plies/Laminates: NA	

Setup

Shot Spacing: 4 shots on an 8 in square; 1 shot at center	Primary Vel. Screens: 6.5 ft, 9.5 ft	Range No.: 1
Witness Panel: 0.02 in 2024-T3 Al	Primary Vel. Location: 8 ft	Temp: 66 °F
Obliquity: 0°	Range to Target: 50 ft	BP: 29.65 inHg
Backing Material: NA	Target to Witness: 6 in	RH: 39%
Condition: Ambient		Barrel/Gun: CT-4006
		Gunner: A. Rixham
		Recorder: Keith Crouse

Ammunition

Projectile	Lot No.	Powder
(1) 7.62 x 39-mm, 123-grain MSC	Chinese Military	IMR 4227 N 120
(2) 5.56 x 45-mm, 55-grain M193 Ball		

Applicable Standards or Procedures

(1) NIJ-STD-0108.01 Level III

Shot No.	Ammo	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel. 2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Footnotes
1	1	1240	2419	1239	2421	2420	None	
2	1	1225	2449	1224	2451	2450	None	
3	1	1244	2412	1243	2414	2413	None	
4	1	1229	2441	1228	2443	2442	None	
5	1	1242	2415	1241	2417	2416	None	
6	1	3101	967	3098	968	968	None	(a)
7	1	2820	1064	2815	1066	1065	None	(a)
8	1	2918	1028	2915	1029	1029	None	(a)
9	1	2876	1043	2870	1045	1044	None	(a)
10	1	3095	969	3091	971	970	None	(a)
11	2	928	3233	927	3236	3235	None	(b)
12	2	923	3250	922	3254	3252	None	(b)

Remarks:

Required velocity: 2400 ±50 ft/s
The sample was tested in a rigid frame.
7.62 x 39 Chinese mild steel core. Hardness: 77 Rockwell B.

Footnotes:

(a) Requested velocity 950 ft/s to 1000 fps
(b) Requested velocity 3200 ft/s +50