

BALLISTIC RESISTANCE TEST

Chesapeake Testing

4603B Compass Point Road
Belcamp, MD 21017

Client: Hardwire, LLC
Job No.: 2084-021-1
Test Date: 3/6/2014

Test Panel

Description: Rigid armor plate; Test ID: HAR13-0002225; Model No.: HW-ULBP-SC, Lot No.: 1313-0013; Serial No.: 1313 013S 000168

Manufacturer: Hardwire, LLC

Sample No.: 1313 013S 000168

Size: Shooters cut
Thickness: NA
Avg. Thick: NA

Heat No.: NA
Weight: 2.83 lbs
Hardness: NA
Plies/Laminates: NA

Date Received: 2/14/2014
Via: FedEx
Returned: FedEx

Setup

Shot Spacing: NIJ-STD-0101.06 Level III
Witness Panel: Clay
Obliquity: 0.0°
Backing Material: 5.5-in clay/plywood
Condition: Conditioned per NIJ-STD-0101.06 Section 6 and tested dry

Primary Vel. Screens (ft): 39.500, 39.833, 44.166, 44.500
Primary Vel. Location (ft): 42.000
Range to Target (ft): 50.200
Target to Witness (in): 0.000

Range No.: 5
Temp: 65.6 °F
BP: 30.4 inHg
RH: 25.7%
Barrel/Gun: CT-4006
Gunner: Aaron Rixham
Recorder: Brad Shaffer

Ammunition

Projectile	Lot No.	Powder
(1) 7.62 x 39-mm, 123-grain PS Ball	Russian	IMR 4227

Applicable Standards or Procedures

- (1) Clay Drops - 18.7 mm, 19.8 mm, 18.1 mm, 20.7 mm, 17.8 mm
- (2) NIJ-STD-0101.06 Level III (modified)
- (3) Customer request

Shot No.	Ammo	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel. 2 (ft/s)	Avg. Vel. (ft/s)	Striking Vel. (ft/s)	Penetration	Deformation (mm)	Footnotes
1	1	2077	2407	1798	2410	2409	2401	None	26.6	
2	1	2058	2430	1781	2433	2431	2423	None	28.2	
3	1	2047	2443	1773	2444	2443	2435	None	NA	
4	1	2060	2427	1784	2429	2428	2420	None	NA	
5	1	2050	2439	1775	2441	2440	2432	None	NA	
6	1	2032	2461	1759	2463	2462	2454	None	NA	

Remarks:

Required velocity: 2400 to 2450 ft/s
R5 box temp.: 93.0 °F
Block 12 clay temp.: 92.1 °F
Projectiles were provided by Chesapeake Testing.

Footnotes: