

# PROTECTION BALLISTIC LIMIT TEST, V<sub>50</sub> BL(P)

## NTS-Chesapeake Testing

4603B Compass Point Road  
Belcamp, MD 21017

Client: ShotStop Ballistics, LLC  
Job No.: 2631-051-B  
Test Date: 12/5/2019  
Page 1 of 2

## Test Panel

Description: Torso plate tested stand alone. Plate Size: PS1RF1-10x12SHSC; Model #: PS1RF1SC. Lot #: 1-12+19

Manufacturer: ShotStop Ballistics, LLC

Sample No.: PS1RF1-10x12SHSC

Size: See Remarks  
Avg. Thick: NA  
Thickness: NA

Weight: See Remarks  
Plies/Laminates: NA  
Required BL(P): NA

Date Received: 12/2/2019  
Via: UPS  
Returned: UPS

## Setup

Shot Spacing: NIJ-STD-0101.07 Level RF1 (Modified)  
Witness Panel: Clay  
Backing Material: 5.5-in clay/plywood  
Condition: Ambient

Primary Vel. Screens (ft): 5.000, 5.333, 19.667, 20.000  
Primary Vel. Location (ft): 12.500  
Range to Target (ft): 25.000  
Target to Witness (in): 0.000

Range No.: 2  
Temp: 66.5 °F  
BP: 29.7 inHg  
RH: 38.0%  
Barrel/Gun: Test Barrel  
Gunner: Austin Blake  
Recorder: Jesse Fulk

## Ammunition

Projectile	Lot No.	Powder
(1) 7.62 x 51-mm, 149-grain M80 FMJ	NA	H4350

## Applicable Standards or Procedures

Clay Drop 1 - Drop Time: 11:40 AM; Block No. 53; Temp: 92.6 °F; Drop Depths: 25.5 mm, 25.7 mm, 23.4 mm  
(1) NIJ-STD-0101.07 Level RF1 (Modified)  
(2) Customer request

Shot No.	Powder/Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel. 2 (ft/s)	Avg. Vel. (ft/s)	Result	Include in V <sub>50</sub>	Obliq. (°)	Footnotes
1	64.0	148.0	5362	2797	5118	2801	2799	P	No	0.0	
2	66.0	148.0	5199	2885	4962	2889	2887	P	No	0.0	
3	69.0	148.0	4981	3011	4757	3013	3012	P	No	0.0	
4	72.0	148.0	4771	3144	4554	3147	3146	P	No	0.0	
5	75.0	148.0	4562	3288	4354	3292	3290	P	No	0.0	
6	79.0	148.0	4413	3399	4212	3403	3401	C	Yes	0.0	
7	77.0	148.0	4413	3399	4212	3403	3401	C	Yes	0.0	
8	75.5	148.0	4586	3271	4378	3274	3272	P	No	0.0	
9	76.5	148.0	4503	3331	4300	3333	3332	P	Yes	0.0	
10	77.5	148.0	4417	3396	4217	3399	3397	C	Yes	0.0	
11	76.5	148.0	4510	3326	4303	3331	3328	P	Yes	0.0	
12	77.3	148.0	4503	3331	4298	3335	3333	P	Yes	0.0	

### Remarks

Required velocity: 2780 ± 30 ft/s,  
Plate 01-04-19-828; Size: 10.00 x 12.00 in; Weight: 3.05 lbs.  
Plate 01-04-19-827; Size: 10.00 x 12.00 in; Weight: 3.10 lbs.

### V<sub>50</sub> Summary:

No. Points: 3 and 3  
V<sub>50</sub>: 3365 ft/s  
High Partial: 3333 ft/s  
Low Complete: 3397 ft/s  
Range of Results (ROR): 73 ft/s  
Range of Mix Results (RMR): NA  
Gap: 64 ft/s

### Footnotes: