

PROTECTION BALLISTIC LIMIT TEST, V₅₀ BL(P)

NTS-Chesapeake Testing

4603B Compass Point Road
Belcamp, MD 21017

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

Test Panel

Description: Torso plate tested stand alone. Plate Size: SH3+10x12MC; Model #: D1652SSB. Lot #: 1-12+19

Manufacturer: ShotStop Ballistics, LLC

Sample No.: D1652SSB

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: 66.7 °F
BP: 29.7 inHg
RH: 38.5%
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: 12:45 PM; Block No. 53; Temp: 91.5 °F; Drop Deaths: 26.9 mm, 26.5 mm, 26.7 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 ₅₀	Obliq. (°)	Footnotes
1	64.0	148.0	5240	2863	5001	2866	2864	P	No	0.0	
2	66.0	148.0	4991	3005	4762	3010	3008	P	No	0.0	
3	69.0	148.0	4749	3159	4532	3163	3161	P	No	0.0	
4	72.0	148.0	4549	3297	4342	3301	3299	P	Yes	0.0	
5	74.0	148.0	4608	3255	4398	3259	3257	C	Yes	0.0	
6	73.0	148.0	4747	3160	4532	3163	3161	P	No	0.0	
7	75.0	148.0	4518	3320	4313	3323	3322	P	Yes	0.0	
8	77.0	148.0	4503	3331	4298	3335	3333	C	No	0.0	
9	76.0	148.0	4554	3294	4347	3297	3296	C	No	0.0	
10	75.0	148.0	4674	3209	4459	3214	3212	C	Yes	0.0	
11	74.0	148.0	4642	3231	4427	3238	3235	P	Yes	0.0	
12	74.5	148.0	4608	3255	4398	3259	3257	C	Yes	0.0	

Remarks

Required velocity: 2780 ± 30 ft/s,
Plate 01-04-19-845; Size: 10.00 x 12.00 in; Weight: 2.69 lbs.
Plate 01-04-19-846; Size: 10.00 x 12.00 in; Weight: 2.64 lbs.

Footnotes:

V₅₀ Summary:

No. Points: 3 and 3
V₅₀: 3264 ft/s
High Partial: 3322 ft/s
Low Complete: 3212 ft/s
Range of Results (ROR): 110 ft/s
Range of Mix Results (RMR): 110 ft/s
Gap: NA