

Element U.S. Space & Defense Test Report for Ballistic Resistance and Ballistic Limit, V_{50} BL(P) Testing

Project No.: PH00013033 Tested: 30 October 2024 P.O. No.: LOI OH21072

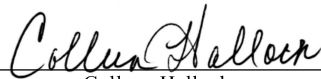
Prepared For

Delta Defense Technology Inc. | 563 Ebury Place | Delta, BC V3M 6M8 CA

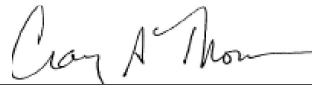
Attention: Kevin Xiang

Prepared By

Element U.S. Space & Defense | 4603B Compass Point Road | Belcamp, MD 21017 | 410-297-8154 |
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Further dissemination only as directed by Delta Defense Technology Inc., January 2025.

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Revision History

Rev.	Description	Issue Date
0	Initial Release	28 January 2025

BALLISTIC RESISTANCE TEST

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Project No.: PH00013033-1

Test Date: 10/30/2024

Page 1 of 1

Test Panel

Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc

Sample No.: T2439P001

Size: 10.00 x 12.00 in
Avg. Thickness: N/A
Thicknesses: N/A

Weight: 3.280 lbs
Plies/Laminates: N/A

Date Received: 10/04/2024
Received Via: FEDEX, Express
Saver
Returned Via: FEDEX, Express
Saver

Setup

Shot Spacing: NIJ-STD-0101.07
Level RF1
Witness Panel: Clay
Backing Material: 5.5-in clay/plywood
Condition: Conditioned per
ASTM E3078M-23

Primary Vel. Screens (ft): 5.000, 5.333,
19.666, 20.000
Primary Vel. Location (ft): 12.500
Range to Target (ft): 25.000
Target to Witness (in): 0.000

Range No.: Range 5
Temp: 69.1 °F
BP: 30.4 inHg
RH: 39 %
Barrel/Gun: WC078546
Gunner: Justin Long
Recorder: Joseph Gerdes

Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) 7.62 x 51-mm, 149-grain M80 FMJ	NA	Military	N133

Applicable Standards or Procedures

Clay Drop 1 - Drop Time: 7:32 AM; Block No. WC074185; Temp: 93.9 °F; Drop Depths: 19.2 mm,17.7 mm,17.8 mm,17mm, 18.4 mm

(1) NIJ-STD-0101.07 Level RF1 (Modified)

(2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel.2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes
1	1	39.8	146.0	5369	2794	5126	2796	2795	None	35.2	0	
2	1	39.8	146.0	5360	2799	5117	2801	2800	None	40.6	0	
3	1	39.8	146.6	5356	2801	5113	2803	2802	None	NA	0	
4	1	39.7	146.7	5356	2801	5117	2801	2801	None	NA	30	
5	1	39.7	146.9	5365	2796	5126	2796	2796	None	NA	30	
6	1	39.7	147.0	5373	2792	5130	2794	2793	None	NA	0	

Remarks:

Required velocity: 2750 - 2810 ft/s.

Projectile Yaw Check: 0° on all impacts.

Dropped and wet per NIJ 07.

Footnotes:

N/A

BALLISTIC RESISTANCE TEST

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Project No.: PH00013033-2

Test Date: 10/30/2024

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Test Panel

Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc

Sample No.: T2439P002

Size: 10.00 x 12.00 in
Avg. Thickness: N/A
Thicknesses: N/A

Weight: 3.280 lbs
Plies/Laminates: N/A

Date Received: 10/04/2024
Received Via: FEDEX, Express
Saver
Returned Via: FEDEX, Express
Saver

Setup

Shot Spacing: NIJ-STD-0101.07
Level RF1
Witness Panel: Clay
Backing Material: 5.5-in clay/plywood
Condition: Conditioned per
ASTM E3078M-23

Primary Vel. Screens (ft): 5.000, 5.333,
19.666, 20.000
Primary Vel. Location (ft): 12.500
Range to Target (ft): 25.000
Target to Witness (in): 0.000

Range No.: Range 5
Temp: 68.8 °F
BP: 30.4 inHg
RH: 41 %
Barrel/Gun: WC078546
Gunner: Justin Long
Recorder: Joseph Gerdes

Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) 7.62 x 51-mm, 149-grain M80 FMJ	NA	Military	N133

Applicable Standards or Procedures

Clay Drop 1 - Drop Time: 7:55 AM; Block No. WC074185; Temp: 93.2 °F; Drop Depths: 20.4 mm, 17.6 mm, 17.5 mm, 17.8mm, 17.6 mm

(1) NIJ-STD-0101.07 Level RF1 (Modified)

(2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel. 2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes
1	1	39.8	147.0	5343	2807	5104	2808	2808	None	43.2	0	
2	1	39.7	147.2	5304	2828	5065	2830	2829	None	38.6	0	
3	1	39.6	147.3	5360	2799	5117	2801	2800	None	NA	0	
4	1	39.6	147.4	5417	2769	5169	2773	2771	None	NA	30	
5	1	39.6	147.4	5425	2765	5182	2766	2765	None	NA	30	
6	1	39.6	147.4	5386	2785	5143	2787	2786	None	NA	0	

Remarks:

Required velocity: 2750 - 2810 ft/s.

Projectile Yaw Check: 0° on all impacts.

Dropped and wet per NIJ 07.

Footnotes:

N/A

BALLISTIC RESISTANCE TEST

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Project No.: PH00013033-3

Test Date: 10/30/2024

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Test Panel

Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc

Sample No.: T2439P003

Size: 10.00 x 12.00 in
Avg. Thickness: N/A
Thicknesses: N/A

Weight: 3.280 lbs
Plies/Laminates: N/A

Date Received: 10/04/2024
Received Via: FEDEX, Express
Saver
Returned Via: FEDEX, Express
Saver

Setup

Shot Spacing: NIJ-STD-0101.07
Level RF1
Witness Panel: Clay
Backing Material: 5.5-in clay/plywood
Condition: Conditioned per
ASTM E3078M-23

Primary Vel. Screens (ft): 5.000, 5.333,
19.666, 20.000
Primary Vel. Location (ft): 12.500
Range to Target (ft): 25.000
Target to Witness (in): 0.000

Range No.: Range 5
Temp: 68.8 °F
BP: 30.4 inHg
RH: 42 %
Barrel/Gun: WC060607
Gunner: Justin Long
Recorder: Joseph Gerdes

Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) 7.62 x 39-mm, 123-grain MSC	128-73-31	Chinese	N 110

Applicable Standards or Procedures

Clay Drop 1 - Drop Time: 8:25 AM; Block No. WC074188; Temp: 95.3 °F; Drop Depths: 18.1 mm,17.6 mm,17.1 mm,17.6mm, 17.2 mm

(1) NIJ-STD-0101.07 Level RF1 (Modified)

(2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel.2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes
1	1	20.1	123.0	6254	2398	5972	2400	2399	None	29.4	0	
2	1	20.1	122.1	6202	2419	5920	2421	2420	None	29.8	0	
3	1	20.0	122.1	6215	2414	5933	2416	2415	None	NA	0	
4	1	20.0	122.1	6228	2408	5946	2411	2410	None	NA	30	
5	1	20.0	122.2	6276	2390	5994	2391	2391	None	NA	30	
6	1	20.0	122.2	6246	2402	5964	2403	2402	None	NA	0	

Remarks:

Required velocity: 2370 - 2430 ft/s.

Projectile Yaw Check: 0° on all impacts.

Dropped and wet per NIJ 07.

Footnotes:

N/A

BALLISTIC RESISTANCE TEST

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Project No.: PH00013033-4

Test Date: 10/30/2024

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Test Panel

Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc

Sample No.: T2439P004

Size: 10.00 x 12.00 in
Avg. Thickness: N/A
Thicknesses: N/A

Weight: 3.270 lbs
Plies/Laminates: N/A

Date Received: 10/04/2024
Received Via: FEDEX, Express
Saver
Returned Via: FEDEX, Express
Saver

Setup

Shot Spacing: NIJ-STD-0101.07
Level RF1
Witness Panel: Clay
Backing Material: 5.5-in clay/plywood
Condition: Conditioned per
ASTM E3078M-23

Primary Vel. Screens (ft): 5.000, 5.333,
19.666, 20.000
Primary Vel. Location (ft): 12.500
Range to Target (ft): 25.000
Target to Witness (in): 0.000

Range No.: Range 5
Temp: 68.8 °F
BP: 30.4 inHg
RH: 43 %
Barrel/Gun: WC060607
Gunner: Justin Long
Recorder: Joseph Gerdes

Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) 7.62 x 39-mm, 123-grain MSC	128-73-31	Chinese	N 110

Applicable Standards or Procedures

Clay Drop 1 - Drop Time: 8:45 AM; Block No. WC074188; Temp: 95.1 °F; Drop Depths: 20.2 mm,17.8 mm,17.8 mm,20.3mm, 17.5 mm

(1) NIJ-STD-0101.07 Level RF1 (Modified)

(2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel. 2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes
1	1	20.1	122.2	6267	2393	5990	2393	2393	None	29.0	0	
2	1	20.0	122.5	6241	2403	5964	2403	2403	None	30.4	0	
3	1	20.0	122.5	6220	2412	5942	2412	2412	None	NA	0	
4	1	20.0	122.8	6272	2392	5990	2393	2392	None	NA	30	
5	1	20.0	122.8	6319	2374	6033	2376	2375	None	NA	30	
6	1	20.0	122.9	6306	2379	6020	2381	2380	None	NA	0	

Remarks:

Required velocity: 2370 - 2430 ft/s.
Projectile Yaw Check: 0° on all impacts.
Dropped and wet per NIJ 07.

Footnotes:

N/A

BALLISTIC RESISTANCE TEST

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Project No.: PH00013033-5

Test Date: 10/30/2024

Page 1 of 1

Test Panel Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc

Sample No.: T2439P005

Size: 10.00 x 12.00 in
Avg. Thickness: N/A
Thicknesses: N/A

Weight: 3.270 lbs
Plies/Laminates: N/A

Date Received: 10/04/2024
Received Via: FEDEX, Express
Saver
Returned Via: FEDEX, Express
Saver

Setup

Shot Spacing: NIJ-STD-0101.07
Level RF1
Witness Panel: Clay
Backing Material: 5.5-in clay/plywood
Condition: Conditioned per
ASTM E3078M-23

Primary Vel. Screens (ft): 5.000, 5.333,
19.666, 20.000
Primary Vel. Location (ft): 12.500
Range to Target (ft): 25.000
Target to Witness (in): 0.000

Range No.: Range 5
Temp: 68.8 °F
BP: 30.4 inHg
RH: 44 %
Barrel/Gun: EL0004073
Gunner: Justin Long
Recorder: Joseph Gerdes

Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) 5.56 x 45-mm, 55-grain M193	NA	Military	N 110

Applicable Standards or Procedures

Clay Drop 1 - Drop Time: 9:06 AM; Block No. WC074183; Temp: 96.4 °F; Drop Depths: 20.2 mm,19.8 mm,17.7 mm,18.4mm, 17.4 mm

(1) NIJ-STD-0101.07 Level RF1 (Modified)

(2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel. 2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes
1	1	18.9	54.8	4570	3282	4366	3283	3283	None	25.3	0	
2	1	18.8	54.8	4592	3267	4388	3266	3266	None	21.7	0	
3	1	18.8	54.8	4614	3251	4410	3250	3251	None	NA	0	
4	1	18.8	54.9	4601	3260	4393	3263	3261	None	NA	30	
5	1	18.8	54.9	4583	3273	4375	3276	3275	None	NA	30	
6	1	18.8	54.9	4579	3276	4371	3279	3277	None	NA	0	

Remarks:

Required velocity: 3220 - 3280 ft/s.

Projectile Yaw Check: 0° on all impacts.

Dropped and wet per NIJ 07.

Footnotes:

N/A

BALLISTIC RESISTANCE TEST

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Project No.: PH00013033-6

Test Date: 10/30/2024

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Test Panel Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc

Sample No.: T2439P006

Size: 10.00 x 12.00 in
Avg. Thickness: N/A
Thicknesses: N/A

Weight: 3.280 lbs
Plies/Laminates: N/A

Date Received: 10/04/2024
Received Via: FEDEX, Express
Saver
Returned Via: FEDEX, Express
Saver

Setup

Shot Spacing: NIJ-STD-0101.07
Level RF1
Witness Panel: Clay
Backing Material: 5.5-in clay/plywood
Condition: Conditioned per
ASTM E3078M-23

Primary Vel. Screens (ft): 5.000, 5.333,
19.666, 20.000
Primary Vel. Location (ft): 12.500
Range to Target (ft): 25.000
Target to Witness (in): 0.000

Range No.: Range 5
Temp: 68.8 °F
BP: 30.4 inHg
RH: 43 %
Barrel/Gun: EL0004073
Gunner: Justin Long
Recorder: Joseph Gerdes

Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) 5.56 x 45-mm, 55-grain M193	NA	Military	N 110

Applicable Standards or Procedures

Clay Drop 1 - Drop Time: 9:28 AM; Block No. WC074183; Temp: 95.5 °F; Drop Depths: 20.7 mm,17.8 mm,18.1 mm,17.4mm, 17.8 mm

(1) NIJ-STD-0101.07 Level RF1 (Modified)

(2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel.2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes
1	1	18.8	55.0	4601	3260	4397	3260	3260	None	21.9	0	
2	1	18.8	55.1	4623	3245	4419	3243	3244	None	24.5	0	
3	1	18.8	55.1	4614	3251	4406	3253	3252	None	NA	0	
4	1	18.8	55.1	4631	3239	4419	3243	3241	None	NA	30	
5	1	18.8	55.2	4657	3221	4445	3225	3223	None	NA	30	
6	1	18.8	55.2	4588	3269	4384	3269	3269	None	NA	0	

Remarks:

Required velocity: 3220 - 3280 ft/s.

Projectile Yaw Check: 0° on all impacts.

Dropped and wet per NIJ 07.

Footnotes:

N/A

PROTECTION BALLISTIC LIMIT TEST, V₅₀ BL(P)

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Project No.: PH00013033-A

Test Date: 10/30/2024

Page 1 of 2

Test Panel Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc

Sample No.: M80-V50

Size: See Remarks
Avg. Thickness: N/A
Thicknesses: N/A

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

Date Received: 10/04/2024
Received Via: FEDEX, Express
Saver
Returned Via: FEDEX, Express
Saver

Setup

Shot Spacing: NIJ-STD-0101.07
Level RF1
Witness Panel: Clay
Backing Material: 5.5-in clay
Condition: Conditioned per
ASTM E3078M-23

Primary Vel. Screens (ft): 5.000, 5.333,
19.666, 20.000
Primary Vel. Location (ft): 12.500
Range to Target (ft): 25.000
Target to Witness (in): 0.000

Range No.: Range 5
Temp: 68.8 °F
BP: 30.4 inHg
RH: 44 %
Barrel/Gun: WC075127
Gunner: Justin Long
Recorder: Joseph Gerdes

Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) 7.62 x 51-mm, 149-grain M80 FMJ	NA	Military	N 130

Applicable Standards or Procedures

Clay Drop 1 - Drop Time: 11:10 AM; Block No. WC074206; Temp: 96.8 °F; Drop Depths: 18.1 mm, 19.8 mm, 20.2mm, 20.4mm, 17.6 mm

(1) NIJ-STD-0101.07 Level RF1 (Modified)

(2) MIL-STD-662F

(3) Customer Request

Shot No.	Ammo	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	1	34.0	149.0	5339	2810	5096	2813	2811	P	No	0	
2	1	36.0	149.1	5130	2924	4900	2925	2925	P	No	0	
3	1	39.0	149.1	4857	3088	4636	3092	3090	P	No	0	
4	1	72.5	149.1	4531	3311	4323	3316	3313	P	No	0	
5	1	75.5	149.2	4299	3489	4107	3490	3490	P	No	0	
6	1	78.5	149.2	4262	3519	4071	3521	3520	P	No	0	
7	1	81.0	149.2	4123	3638	3937	3641	3639	P	Yes	0	
8	1	86.0	149.2	3954	3794	3776	3796	3795	C	No	0	
9	1	84.0	149.3	4015	3736	3837	3735	3736	C	Yes	0	
10	1	81.5	149.3	4171	3596	3985	3597	3596	P	Yes	0	
11	1	84.0	149.5	3967	3781	3789	3783	3782	C	No	0	
12	1	82.0	149.5	4136	3627	3950	3629	3628	C	Yes	0	

Remarks:

Requested starting velocity: 2780 ft/s.

Projectile Yaw Check: 0° on all impacts.

Shots 1-6: Panel: SN: T2439P007; Weight: 3.29 lbs.; Size: 10.00 x 12.00 in.

Shots 7-12: Panel: SN: T2439P008; Weight: 3.27 lbs.; Size: 10.00 x 12.00 in.

Dropped per NIJ 07

Footnotes:

N/A

V₅₀ Summary:

No. of Points: 2 and 2

V₅₀: 3650 ft/s

High Partial: 3639 ft/s

Low Complete: 3628 ft/s

Range of Results (ROR): 140 ft/s

Range of Mix Results (RMR): 11 ft/s

Gap: N/A

PROTECTION BALLISTIC LIMIT TEST, V₅₀ BL(P)

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Job No.: PH00013033-A

Test Date: 10/30/2024

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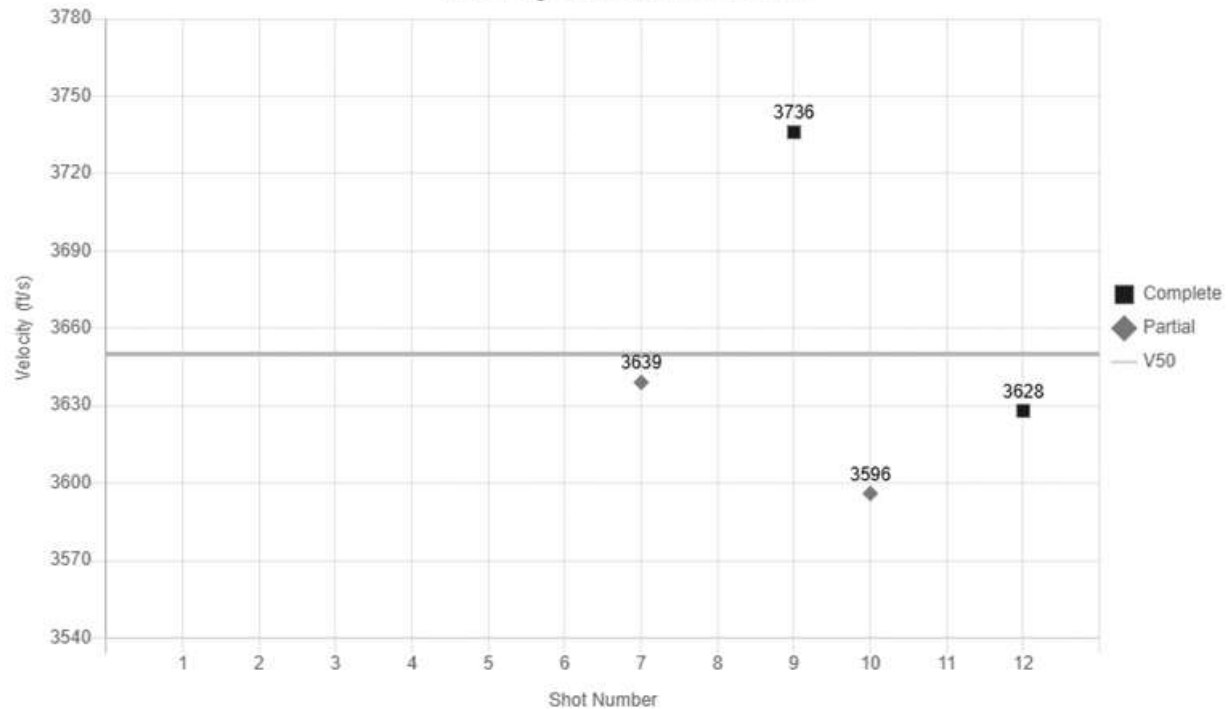
Manufacturer: Delta Defense Technology Inc

Sample No.: M80-V50

V₅₀ Summary:

No. of Points: 2 and 2
V₅₀: 3650 ft/s
High Partial: 3639 ft/s
Low Complete: 3628 ft/s
Range of Results (ROR): 140 ft/s
Range of Mix Results (RMR): 11 ft/s
Gap: N/A

Velocity vs. Shot Number



PROTECTION BALLISTIC LIMIT TEST, V₅₀ BL(P)

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Project No.: PH00013033-B

Test Date: 10/30/2024

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Test Panel Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc

Sample No.: MSC-V50

Size: See Remarks
Avg. Thickness: N/A
Thicknesses: N/A

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

Date Received: 10/04/2024
Received Via: FEDEX, Express
Saver
Returned Via: FEDEX, Express
Saver

Setup

Shot Spacing: NIJ-STD-0101.07
Level RF1
Witness Panel: Clay
Backing Material: 5.5-in clay
Condition: Conditioned per
ASTM E3078M-23

Primary Vel. Screens (ft): 5.000, 5.333,
19.666, 20.000
Primary Vel. Location (ft): 12.500
Range to Target (ft): 25.000
Target to Witness (in): 0.000

Range No.: Range 5
Temp: 68.8 °F
BP: 30.4 inHg
RH: 45 %
Barrel/Gun: EL00004003
Gunner: Justin Long
Recorder: Joseph Gerdes

Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) 7.62 x 39-mm, 123-grain MSC	128-73-31	Chinese	N 110

Applicable Standards or Procedures

Clay Drop 1 - Drop Time: 1:00 PM; Block No. WC074200; Temp: 96.5 °F; Drop Depths: 17.9 mm,17.2 mm,18.4 mm,19.1mm, 20.2 mm

(1) NIJ-STD-0101.07 Level RF1 (Modified)

(2) MIL-STD-662F

(3) Customer Request

Shot No.	Ammo	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	1	34.0	122.0	6063	2474	5794	2474	2474	P	No	0	
2	1	37.0	122.1	5477	2739	5234	2738	2739	P	No	0	
3	1	41.0	122.4	5065	2962	4840	2961	2961	P	No	0	
4	1	72.5	122.4	4688	3200	4479	3200	3200	P	No	0	
5	1	76.5	122.6	4653	3224	4445	3225	3224	P	No	0	
6	1	81.0	122.7	4193	3577	4002	3581	3579	P	Yes	0	
7	1	84.5	122.8	3925	3822	3749	3823	3822	C	No	0	
8	1	82.5	122.8	3967	3781	3785	3787	3784	C	No	0	
9	1	80.5	122.9	4115	3645	3928	3649	3647	C	No	0	
10	1	78.0	123.2	4236	3541	4041	3547	3544	C	No	0	
11	1	76.0	123.3	4505	3330	4306	3329	3329	C	Yes	0	
12	1	73.0	123.3	4670	3212	4462	3212	3212	P	No	0	

Remarks:

Requested starting velocity: 2400 ft/s.

Projectile Yaw Check: 0° on all impacts.

Shots 1-6: Panel: SN: T2439P009; Weight: 3.27 lbs.; Size: 10.00 x 12.00 in.

Shots 7-12: Panel: SN: T2439P010; Weight: 3.29 lbs.; Size: 10.00 x 12.00 in.

Dropped per NIJ 07

Footnotes:

N/A

V₅₀ Summary:

No. of Points: 1 and 1

V₅₀: 3454 ft/s

High Partial: 3579 ft/s

Low Complete: 3329 ft/s

Range of Results (ROR): 250 ft/s

Range of Mix Results (RMR): 250 ft/s

Gap: N/A

PROTECTION BALLISTIC LIMIT TEST, V₅₀ BL(P)

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Job No.: PH00013033-B

Test Date: 10/30/2024

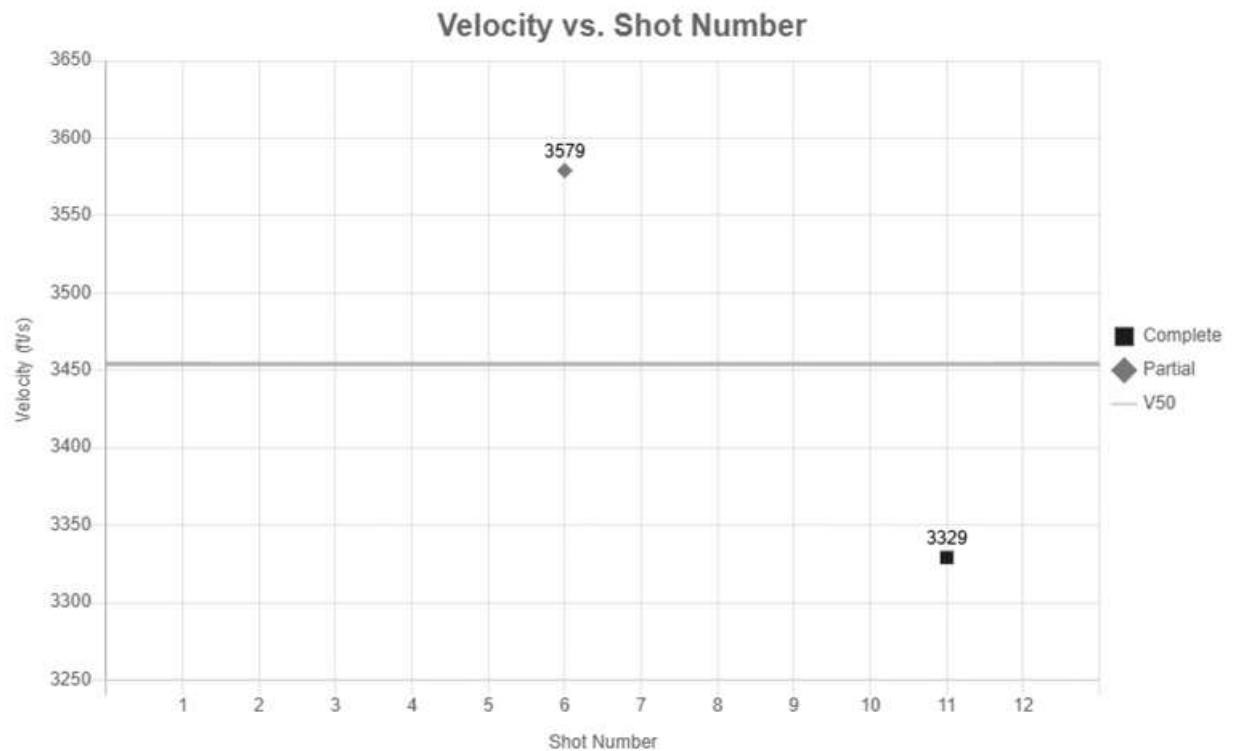
Page 2 of 2

Manufacturer: Delta Defense Technology Inc

Sample No.: MSC-V50

V₅₀ Summary:

No. of Points: 1 and 1
V₅₀: 3454 ft/s
High Partial: 3579 ft/s
Low Complete: 3329 ft/s
Range of Results (ROR): 250 ft/s
Range of Mix Results (RMR): 250 ft/s
Gap: N/A



PROTECTION BALLISTIC LIMIT TEST, V₅₀ BL(P)

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Project No.: PH00013033-C

Test Date: 10/30/2024

Page 1 of 2

Test Panel Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc

Sample No.: M193-V50

Size: See Remarks
Avg. Thickness: N/A
Thicknesses: N/A

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

Date Received: 10/04/2024
Received Via: FEDEX, Express
Saver
Returned Via: FEDEX, Express
Saver

Setup

Shot Spacing: NIJ-STD-0101.07
Level RF1
Witness Panel: Clay
Backing Material: 5.5-in clay
Condition: Conditioned per
ASTM E3078M-23

Primary Vel. Screens (ft): 5.000, 5.333,
19.666, 20.000
Primary Vel. Location (ft): 12.500
Range to Target (ft): 25.000
Target to Witness (in): 0.000

Range No.: Range 5
Temp: 68.6 °F
BP: 30.4 inHg
RH: 44 %
Barrel/Gun: EL00004001
Gunner: Justin Long
Recorder: Joseph Gerdes

Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) 5.56 x 45-mm, 55-grain M193	NA	Military	Accurate 2230

Applicable Standards or Procedures

Clay Drop 1 - Drop Time: 1:40 PM; Block No. WC074200; Temp: 96.1 °F; Drop Depths: 19.2 mm,20.1 mm,20.3 mm,19.1mm, 17.9 mm

(1) NIJ-STD-0101.07 Level RF1 (Modified)

(2) MIL-STD-662F

(3) Customer Request

Shot No.	Ammo	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	1	27.5	55.1	4731	3171	4518	3172	3171	P	No	0	
2	1	30.5	55.1	4340	3456	4145	3458	3457	P	No	0	
3	1	33.5	55.1	4037	3716	3859	3714	3715	P	No	0	
4	1	36.5	55.1	3768	3981	3598	3984	3982	P	No	0	
5	1	38.5	55.1	3598	4169	3438	4169	4169	P	No	0	
6	1	41.5	55.3	3433	4369	3277	4374	4372	BH	No	0	
7	1	41.0	55.3	3494	4293	3342	4289	4291	P	No	0	(a)
8	1	41.0	55.3	3490	4298	3334	4299	4299	P	No	0	(a)
9	1	41.0	55.3	3472	4320	3316	4322	4321	P	Yes	0	(a)
10	1	41.0	55.3	3455	4342	3303	4339	4340	P	Yes	0	(a)
11	1	40.5	55.3	3520	4261	3364	4261	4261	C	Yes	0	
12	1	40.0	55.4	3494	4293	3342	4289	4291	C	Yes	0	

Remarks:

Requested starting velocity: 3150 ft/s.

Projectile Yaw Check: 0° on all impacts.

Shots 1-6: Panel: SN: T2439P011; Weight: 3.29 lbs.; Size: 10.00 x 12.00 in.

Shots 7-12: Panel: SN: T2439P012; Weight: 3.32 lbs.; Size: 10.00 x 12.00 in.

Dropped per NIJ 07

Footnotes:

(a) Barrel Limitations Reached

V₅₀ Summary:

No. of Points: 2 and 2

V₅₀: 4303 ft/s

High Partial: 4340 ft/s

Low Complete: 4261 ft/s

Range of Results (ROR): 79 ft/s

Range of Mix Results (RMR): 79 ft/s

Gap: N/A

PROTECTION BALLISTIC LIMIT TEST, V₅₀ BL(P)

Element U.S. Space & Defense

4603B Compass Point Road
Belcamp, MD 21017

Client: Delta Defense Technology Inc

Job No.: PH00013033-C

Test Date: 10/30/2024

Page 2 of 2

Manufacturer: Delta Defense Technology Inc

Sample No.: M193-V50

V₅₀ Summary:

No. of Points: 2 and 2

V₅₀: 4303 ft/s

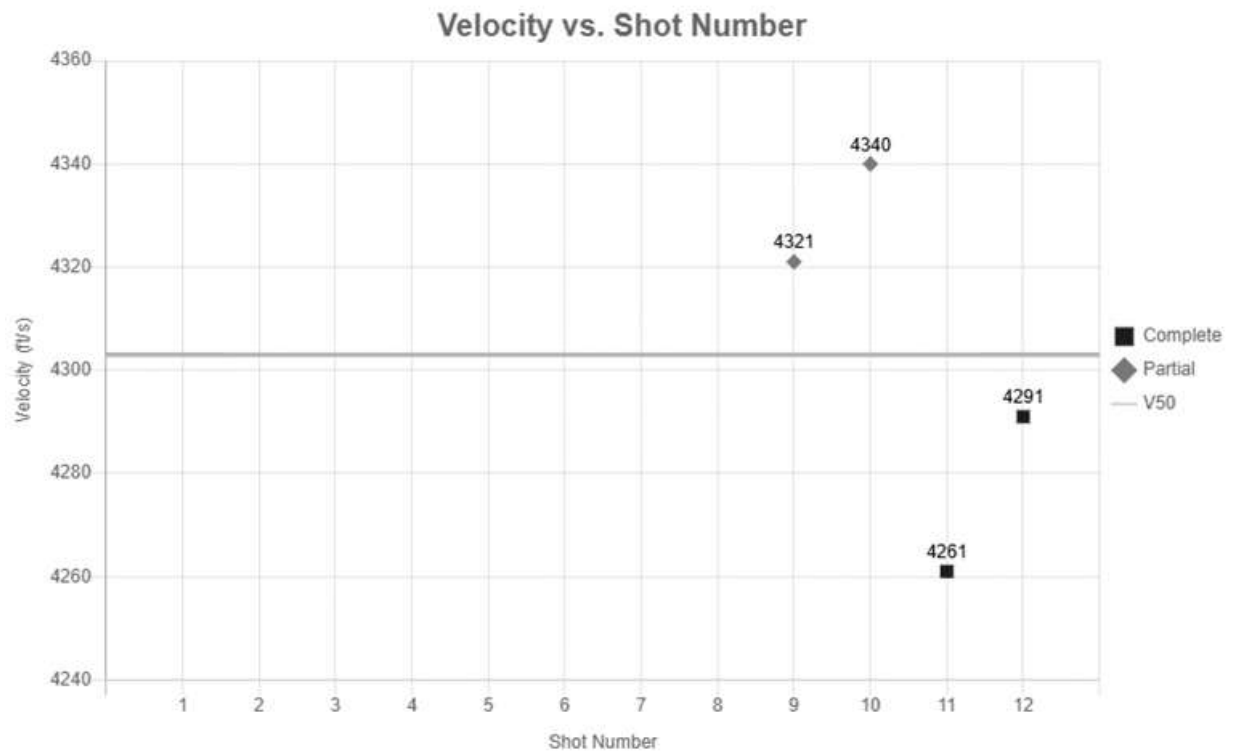
High Partial: 4340 ft/s

Low Complete: 4261 ft/s

Range of Results (ROR): 79 ft/s

Range of Mix Results (RMR): 79 ft/s

Gap: N/A



ATTACHMENT A CALIBRATION DATA

Asset Number	Asset Type	Manufacturer	Model	Calibrated	Due
WC067373	Chronograph 1	YIS/Cowden Group, Inc	Chrono USB	6/5/2024	6/5/2025
WC067372	Chronograph 2	YIS/Cowden Group, Inc	Chrono USB	6/5/2024	6/5/2025
WC067323	Powder Scale	RCBS	1500	1/11/2024	1/11/2025
WC079281	Floor scale	MeasureTek	EHP-30S	2/21/2024	2/21/2025
WC067383	Therm./Clock/Humidity Monitor	Control Company	4040	10/24/2024	10/24/2025
WC064333	100 ft Tape Measure	Starrett	530-100	4/3/2024	4/3/2025
EL00004014	25 ft Tape Measure	Craftsman	CMHT37565	4/3/2024	4/3/2026
WC074970	25 ft Tape Measure	Dewalt Industrial Tool	DWHT36107	9/11/2023	9/11/2025
EL00000203	Thermometer	Control Company	4371	6/1/2023	6/1/2025
WC075102	BDG Gage 03	Starrett	3753A-6/150	2/23/2024	2/21/2025
WC067133	Angle Block	SPI	S501-201	1/30/2023	1/30/2025
WC074985	Digital Caliper	Starrett	798A-6/150	8/1/2024	8/1/2025
EL0004129	Floor scale	Adam	GFK 330a	4/15/2024	4/15/2026
EL00004094	Depth Gage Tool DG 04	Starrett	3753A-6/150	12/12/2023	12/12/2024

END OF REPORT