

# **BALLISTIC RESISTANCE TEST**

## Element U.S. Space & Defense

4603B Compass Point Road Belcamp, MD 21017 Client: Tacticshop LLC Project No.: PH00012601-4 Test Date: 08/26/2024

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Test Panel Description: Ballistic helmet with pads and retention system

Manufacturer: Tacticshop LLC Sample No.: (9mm, V0) 520040

Size: Large Weight: 3,340 lbs

Avg. Thickness: 0.458 in Plies/Laminates: N/A Received

Thicknesses: 0.448 in, 0.466 in, 0.453 in, 0.463 in Date Received: 08/23/2024 Received Via: UPS Ground Returned Via: UPS Ground

## Setup

Shot Spacing: NIJ-STD-0106.01 Witness Panel: 0.02 in 2024-T3 Al

Backing Material: N/A Condition: Ambient Primary Vel. Screens (ft): 6.500, 9.500 Primary Vel. Location (ft): 8.000

Range to Target (ft): 16.400 Target to Witness (in): 3.000 Range No.: Range 1 Temp: 68.8 °F BP: 30.2 inHg RH: 50 %

Barrel/Gun: WC075131 Gunner: Adam Beach Recorder: Isaiah Lookingbill

#### Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) 9-mm, 124-grain FMJ	23558	Remington	Accurate No. 2

## Applicable Standards or Procedures

(1) NIJ-STD-0106.01 (Modified)

(2) NIJ-STD-0108.01 Level IIIA (Modified)

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	Obliq.	Footnotes
1	-1	6.2	125.4	2097	1431	2097	1431	1431	None	0	(a)
2	1	6.2	125.4	2105	1425	2105	1425	1425	None	0	(b)
3	1	6.2	125.4	2114	1419	2114	1419	1419	None	0	(c)
4	1	6.2	125.4	2118	1416	2118	1416	1416	None	0	(d)

#### Remarks:

Required Velocity: 1350-1450 ft./s.

Projectile Yaw Check: 0° Yaw on All Impacts.

#### Footnotes:

- (a) Front
- (b) Back
- (c) Right



# BALLISTIC RESISTANCE TEST

Element U.S. Space & Defense

4603B Compass Point Road Belcamp, MD 21017

Client: Tacticshop LLC Project No.: PH00012601-5 Test Date: 08/26/2024

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Test Panel Description: Ballistic helmet with pads and retention system

Manufacturer: Tacticshop LLC Sample No.: (9mm, V0, Wet) 520041

Size: Large Weight: 3,400 lbs

Avg. Thickness: 0.448 in Plies/Laminates: N/A Thicknesses: 0.463 in, 0.442 in,

0.445 in, 0.442 in

Date Received: 08/23/2024 Received Via: UPS Ground Returned Via: UPS Ground

### Setup

Shot Spacing: NIJ-STD-0106.01 Witness Panel: 0.02 in 2024-T3 Al

Backing Material: N/A

Condition: Submerged in water

for 2-4 hours

Primary Vel. Screens (ft): 6.500, 9.500

Primary Vel. Location (ft): 8.000 Range to Target (ft): 16.400

Target to Witness (in): 3.000

Range No.: Range 1

Temp: 68.8 °F BP: 30.2 inHg RH: 52 % Barrel/Gun: WC075131

Gunner: Adam Beach Recorder: Isaiah Lookingbill

## Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) 9-mm, 124-grain FMJ	23558	Remington	Accurate No. 2

## Applicable Standards or Procedures

- (1) NIJ-STD-0106.01 (Modified)
- (2) NIJ-STD-0108.01 Level IIIA (Modified)

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (μ≤)	Vel. 1 (ft/s)	Time 2 (µs)	Vel.2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Obliq.	Footnotes
1	1	6.2	125.4	2105	1425	2105	1425	1425	None	0	(a)
2	1	6.2	125.4	2097	1431	2097	1431	1431	None	0	(b)
3	1	6.2	125.4	2114	1419	2114	1419	1419	None	0	(c)
4	1	6.2	125.4	2110	1422	2110	1422	1422	None	0	(d)

Remarks:

Required Velocity: 1350-1450 ft./s.

Projectile Yaw Check: 0° Yaw on All Impacts.

Footnotes:

- (a) Front
- (b) Back
- (c) Right
- (d) Left



# BALLISTIC RESISTANCE TEST

Element U.S. Space & Defense

4603B Compass Point Road Belcamp, MD 21017 Client: Tacticshop LLC Project No.: PH00012601-6 Test Date: 08/26/2024 Page 1 of 1

Test Panel Description: Ballistic helmet with pads and retention system

Manufacturer: Tacticshop LLC Sample No.: (9mm, V0) 520037

Size: Large Weight: 3.310 lbs

Avg. Thickness: 0.433 in Plies/Laminates: N/A

Thicknesses: 0.440 in, 0.421 in, 0.429 in, 0.441 in Date Received: 08/23/2024
Received Via: UPS Ground
Returned Via: UPS Ground

Setup

Shot Spacing: NIJ-STD-0106.01

Witness Panel: Instrumented head

form

Backing Material: Instrumented head

form

Condition: Ambient

Primary Vel. Screens (ft): 6.500, 9.500

Primary Vel. Location (ft): 8.000 Range to Target (ft): 16.400

Target to Witness (in): 3.000

Range No.: Range 1

Temp: 69.1 °F BP: 30.2 inHg RH: 50 %

Barrel/Gun: WC075131 Gunner: Adam Beach Recorder: Isaiah Lookingbill

#### Ammunition

Ï	Projectile	Lot No.	Manufacturer	Powder
	(1) 9-mm, 124-grain FMJ	23558	Remington	Accurate No. 2

## Applicable Standards or Procedures

(1) NIJ-STD-0106.01 (Modified)

(2) NIJ-STD-0108.01 Level IIIA (Modified)

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	Defor- mation(mm)	Obliq.	Footnotes
1	-1	6.2	125.4	2105	1425	2105	1425	1425	None	344.690	0	(a)
2	1	6.2	125.4	2088	1437	2088	1437	1437	None	393.490	0	(b)
3	1	6.2	125.4	2088	1437	2088	1437	1437	None	287.570	0	(c)
4	1	6.2	125.4	2097	1431	2097	1431	1431	None	316.940	0	(d)

Remarks:

Required Velocity: 1350-1450 ft./s.

Projectile Yaw Check: 0° Yaw on All Impacts.

Footnotes:

(a) Front

(b) Back (c) Right



# BALLISTIC RESISTANCE TEST

Element U.S. Space & Defense-Belcamp

4603B Compass Point Road Belcamp, MD 21017

Client: Tacticshop LLC Project No.: PH00013582 Test Date: 11/19/2024 Page 1 of 1

Test Panel Description: Ballistic helmet with pads and retention system.

Sample No.: (.44 Mag, V0) 520042 Manufacturer: Tacticshop LLC

Size: Large

Avg. Thickness: 0.309 in

Thicknesses: 0.310 in, 0.308 in,

0.308 in, 0.309 in

Weight: 3.230 lbs

Date Received: 11/13/2024 Received Via: USPS Returned Via: USPS

Setup

Shot Spacing: NIJ-STD-

0106.01(Modified)

Witness Panel: 0.02 in 2024-T3 Al Backing Material: NIJ-0106.01 Head

> form Condition: Ambient

Primary Vel. Screens (ft): 6.500, 9.500

Primary Vel. Location (ft): 8.000

Plies/Laminates: N/A

Range to Target (ft): 16.400 Target to Witness (in): 3.000

Range No.: Range 2 Temp: 66.8 °F

BP: 30 inHg RH: 42 %

Barrel/Gun: EL00000169 Gunner: David Bell Recorder: Jacob Arisman

Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) .44 Mag., 240-grain SWCGC	NA	Remington	3 N 38

## Applicable Standards or Procedures

(1) NIJ-STD-0106.01 (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	Obliq.	Footnotes
1	1	13.8	239.7	2149	1396	2157	1391	1393	None	0	(a)
2	1	13.8	239.7	2210	1357	2218	1353	1355	None	0	(b)
3	1	13.8	239.9	2184	1374	2192	1369	1371	None	0	(c)
4	1	13.8	239.9	2101	1428	2110	1422	1425	None	0	(d)

Required velocity: 1350-1450 ft/s.

Projectile yaw check: 0' yaw on all Impacts

Footnotes:

(a) Front

(b) Back (c) Right



# BALLISTIC RESISTANCE TEST

## Element U.S. Space & Defense

4603B Compass Point Road Belcamp, MD 21017

Client: Tacticshop LLC Project No.: PH00012601-1 Test Date: 08/26/2024

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Test Panel | Description: Ballistic helmet with pads and retention system

Manufacturer: Tacticshop LLC Sample No.: (.44 Mag, V0) 520036

Size: Large Avg. Thickness: 0.443 in

Thicknesses: 0.433 in, 0.438 in,

0.441 in, 0.458 in

Date Received: 08/23/2024 Weight: 3.430 lbs Plies/Laminates: N/A

Received Via: UPS Ground Returned Via: UP5 Ground

### Setup

Shot Spacing: NIJ-STD-0106.01 Witness Panel: 0.02 in 2024-T3 Al

Backing Material: N/A Condition: Ambient

Primary Vel. Screens (ft): 6.500, 9.500 Primary Vel. Location (ft): 8.000

Range to Target (ft): 16.400 Target to Witness (in): 3.000

Range No.: Range 1 Temp: 68.8 °F BP: 30.2 inHg RH: 52 %

Barrel/Gun: CT-3033 Gunner: Adam Beach Recorder: Isaiah Lookingbill

#### Ammunition

Projectile	Lot No.	Manufacturer	Powder
(1) .44 Mag., 240-grain SWCGC	NA	Remington	3 N 38

## Applicable Standards or Procedures

- (1) NIJ-STD-0106.01 (Modified)
- (2) NIJ-STD-0108.01 Level IIIA (Modified)

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1	Vel. 1 (ft/s)	Time 2 (µs)	Vel.2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Obliq.	Footnotes
1	1	14.2	239.6	2079	1443	2079	1443	1443	None	0	(a)
2	1	14.2	239.5	2105	1425	2105	1425	1425	None	0	(b)
3	1	14.2	240	2223	1350	2223	1350	1350	None	0	(c)
4	1	14.2	239.9	2192	1369	2192	1369	1369	None	0	(d)

Remarks: Required Velocity: 1350-1450 ft./s.

Projectile Yaw Check: 0° Yaw on All Impacts.

Footnotes:

(a) Front

(b) Back

(c) Right