Demo Project

Report Generated: 09 Sep 2024

HemoSpat v2.0.0

Organization: FORident Software
File Reference: 655321
Incident Date: 04 Jul 1954
Location: 10050 Cielo Drive
Analyst: Hattori Hanzo
Assistant: Alexander de Large

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Project Summary

Incident Information

File Reference: 655321
Date: 04 Jul 1954
Location: 10050 Cielo Drive

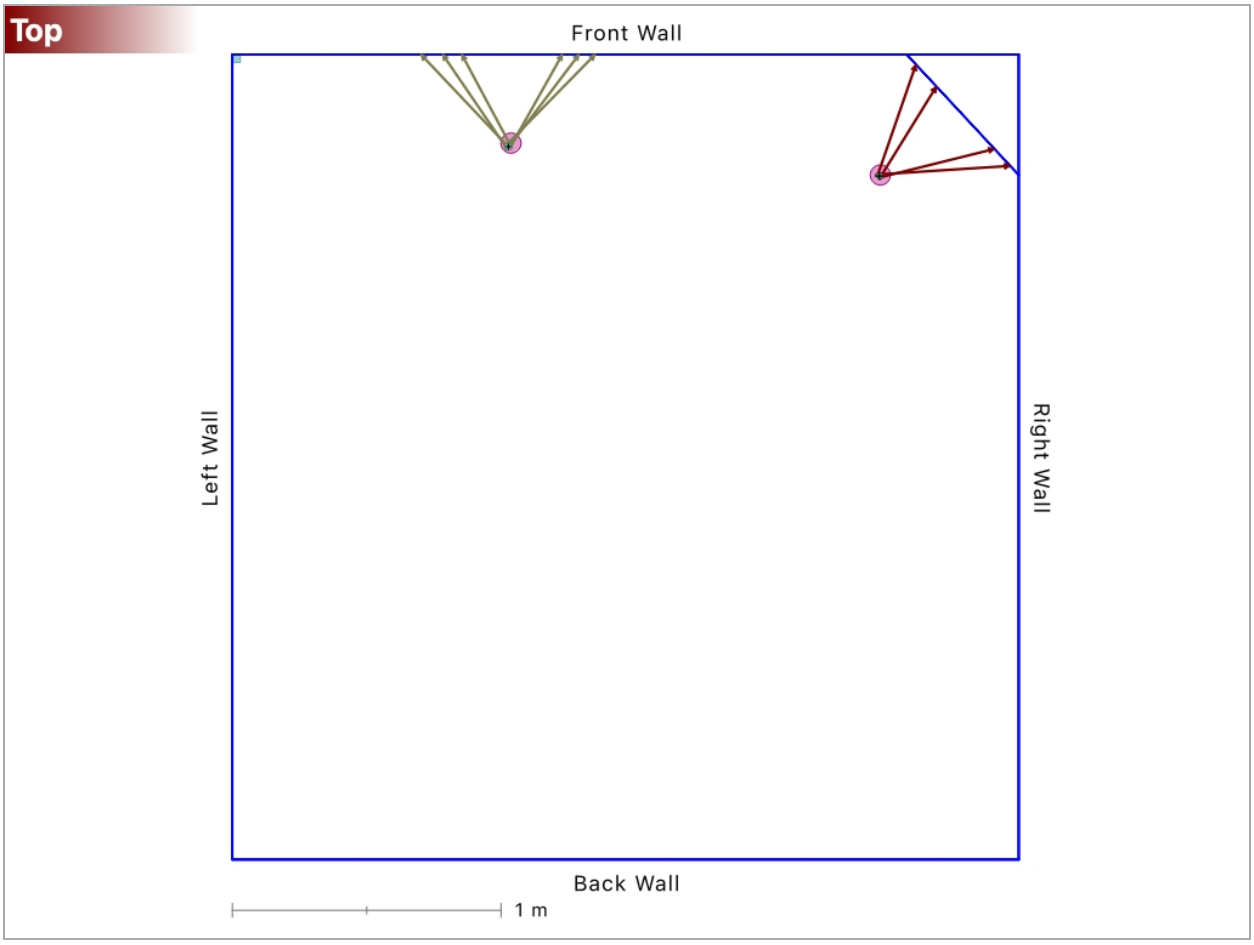
Patterns

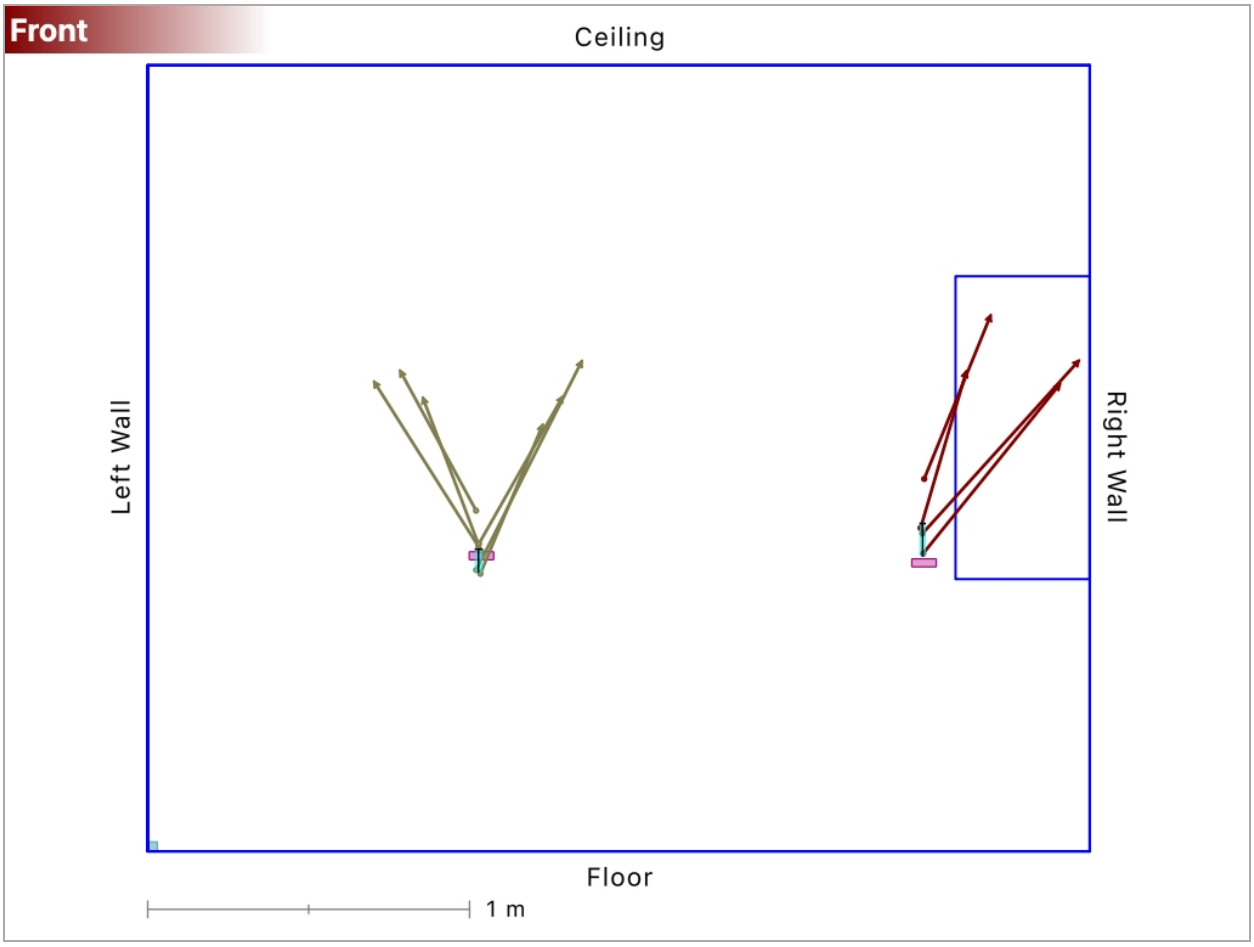
- Pattern 1 (Impact Pattern)
  - 4 bloodstains on 1 surface — 4 on the "Angled"
- Pattern 2 (Impact Pattern)
  - 6 bloodstains on 1 surface — 6 on the "Front Wall"

Project Notes

Arrive at the scene "The spatter's in the next room" Time for HemoSpat

Project Summary





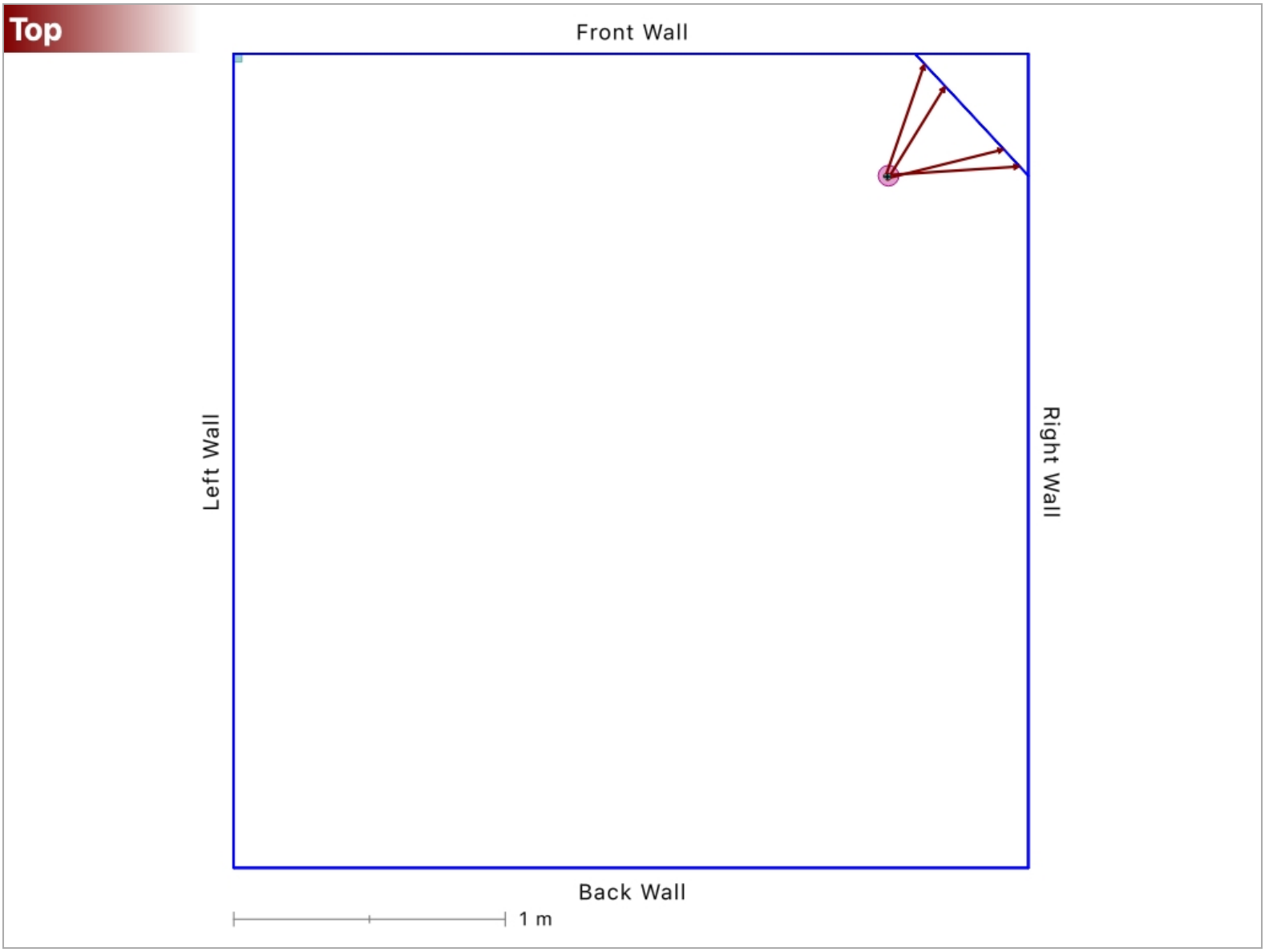
Pattern 1 (Impact Pattern)

Pattern 1 is an *Impact Pattern* which was analyzed using **4 bloodstains** on the Angled. These stains resulted in **4 x-y intersections** used to calculate the origin and **4 stains** were included in the height calculation.

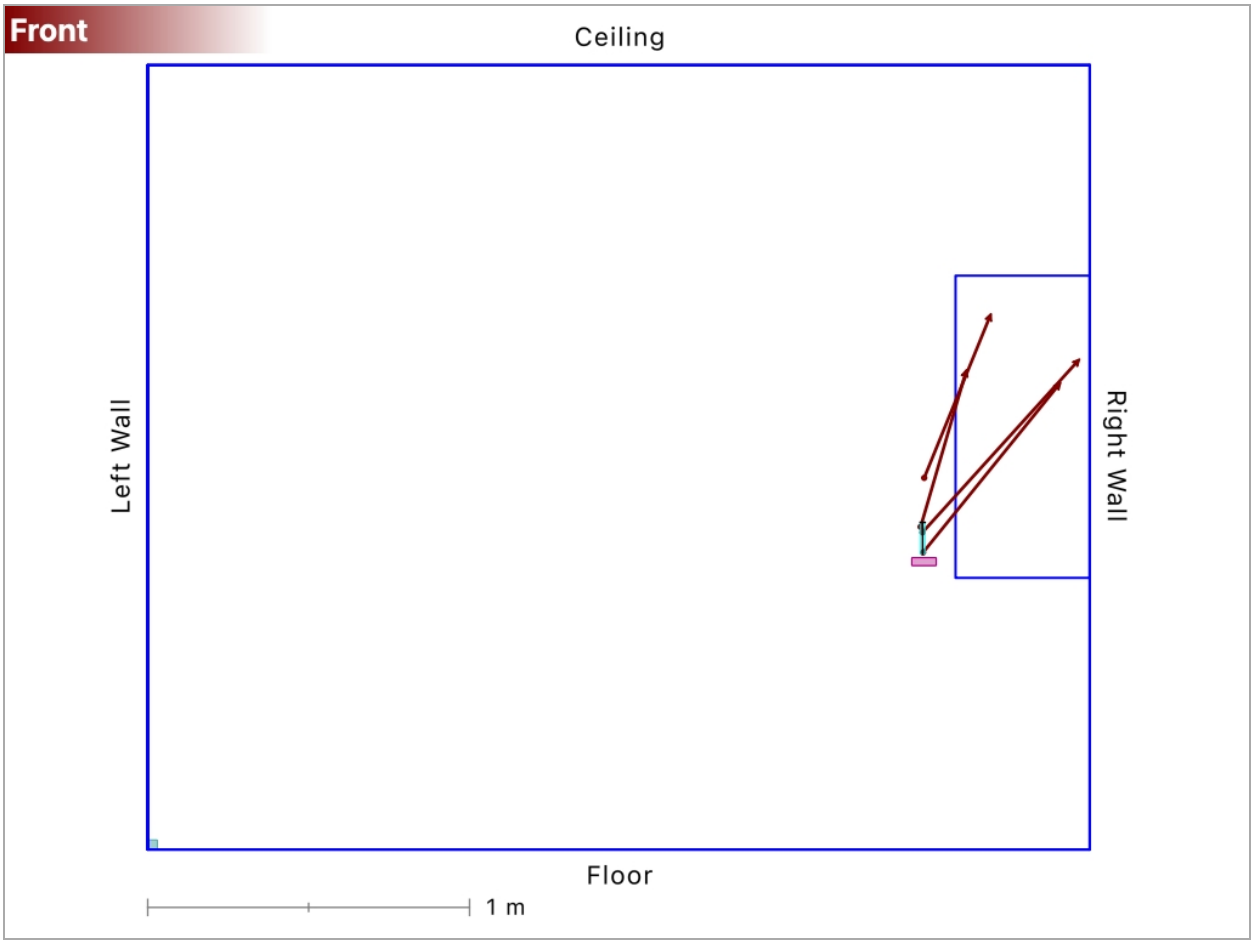
The *minimum* x, y, and z were **(44.6, 239.8, 92.4) cm**. The *maximum* x, y, and z were **(46.1, 241.9, 115.6) cm**.

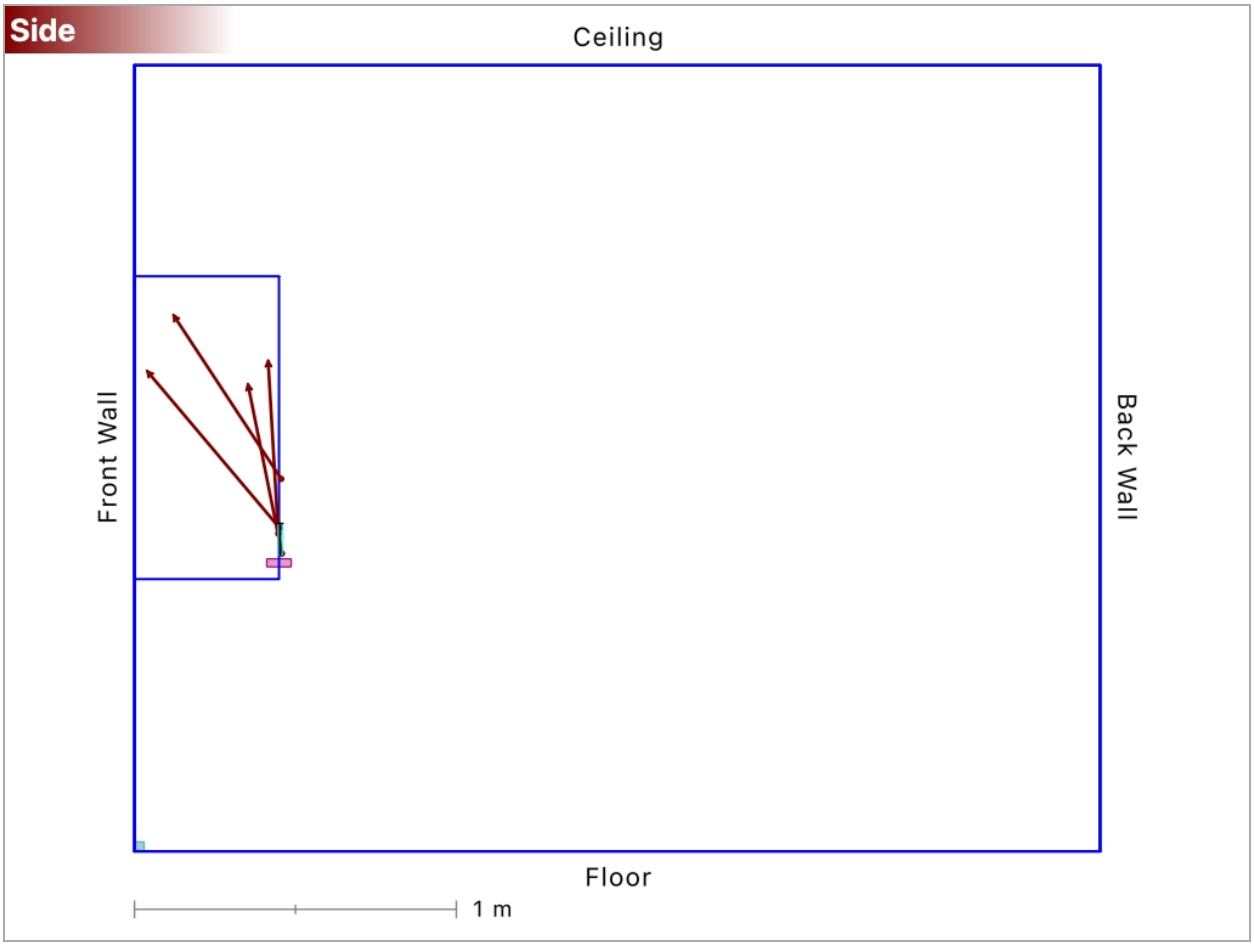
The *area of origin* (x, y, z) was determined to be **(45.3, 240.8, 101.8) cm** with a standard deviation of **(0.8, 0.9, 9.8) cm**.

This project is an experiment. The known origin (x, y, z) of this pattern is **(44.9, 241.2, 90.8) cm**. The distance from the known origin to the calculated origin is **11.0 cm**. The distance for each axis is **(0.4, 0.4, 11.0) cm**.



Pattern 1 (Impact Pattern)

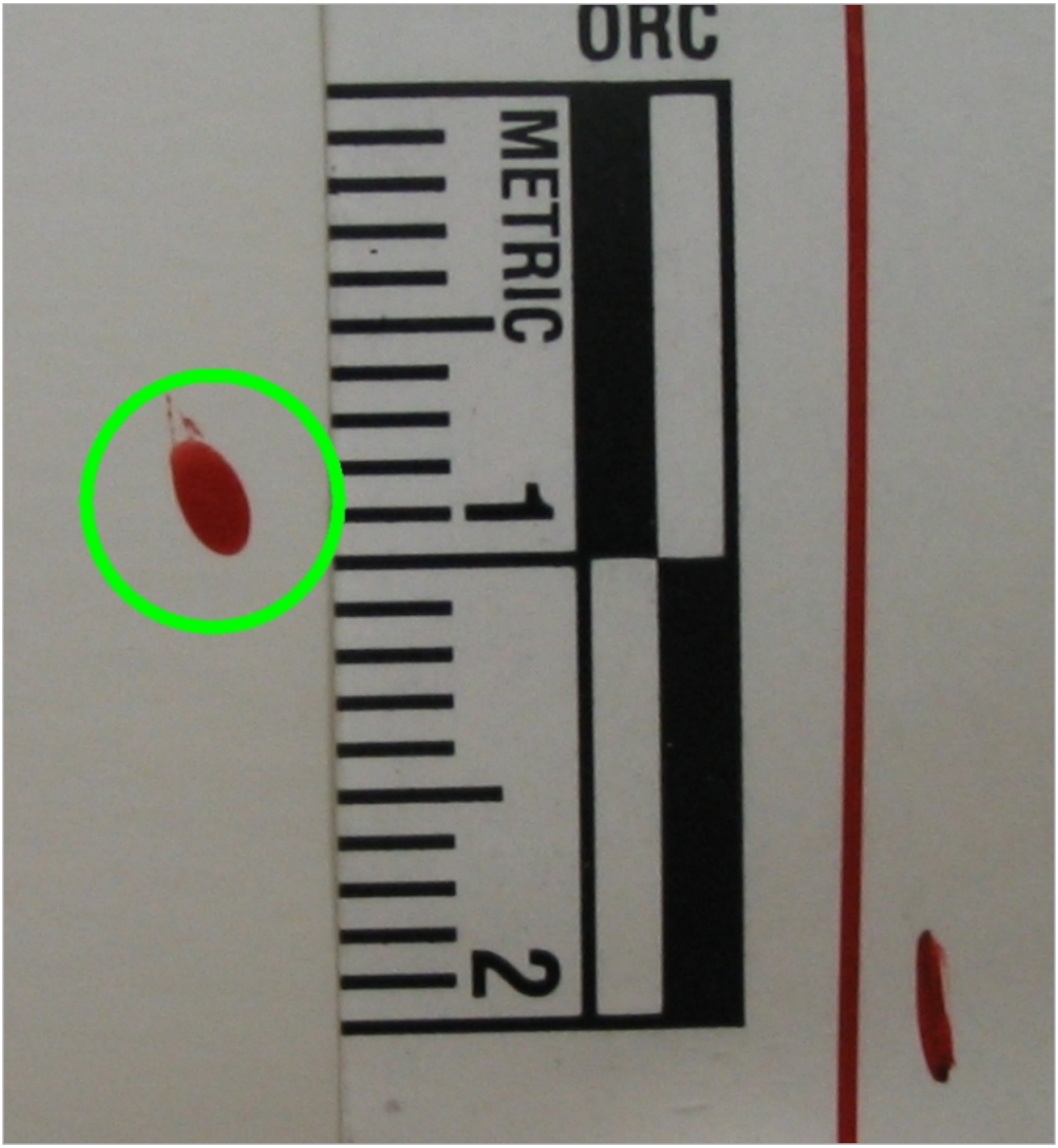




Pattern 1 (Impact Pattern) - Summary

Stain	Surface	Location (x, y, z) (cm)	Major (mm)	Minor (mm)	Area (mm^2)	α (°)	γ (°)
A01	Angled	3.8, 254.4, 149.2	2.4	1.4	2.8	36.0	−22.8
A06	Angled	12.0, 262.0, 166.6	2.0	1.2	1.9	36.2	−11.6
A11	Angled	35.2, 283.6, 145.2	1.5	0.8	0.9	34.1	21.9
A15	Angled	41.5, 289.5, 152.5	2.8	1.5	3.2	31.4	29.8

A01 (Spatter Stain)



Surface: Angled

Location (x, y, z): (3.8, 254.4, 149.2) cm

Pattern: Pattern 1

Major axis length: 2.4 mm

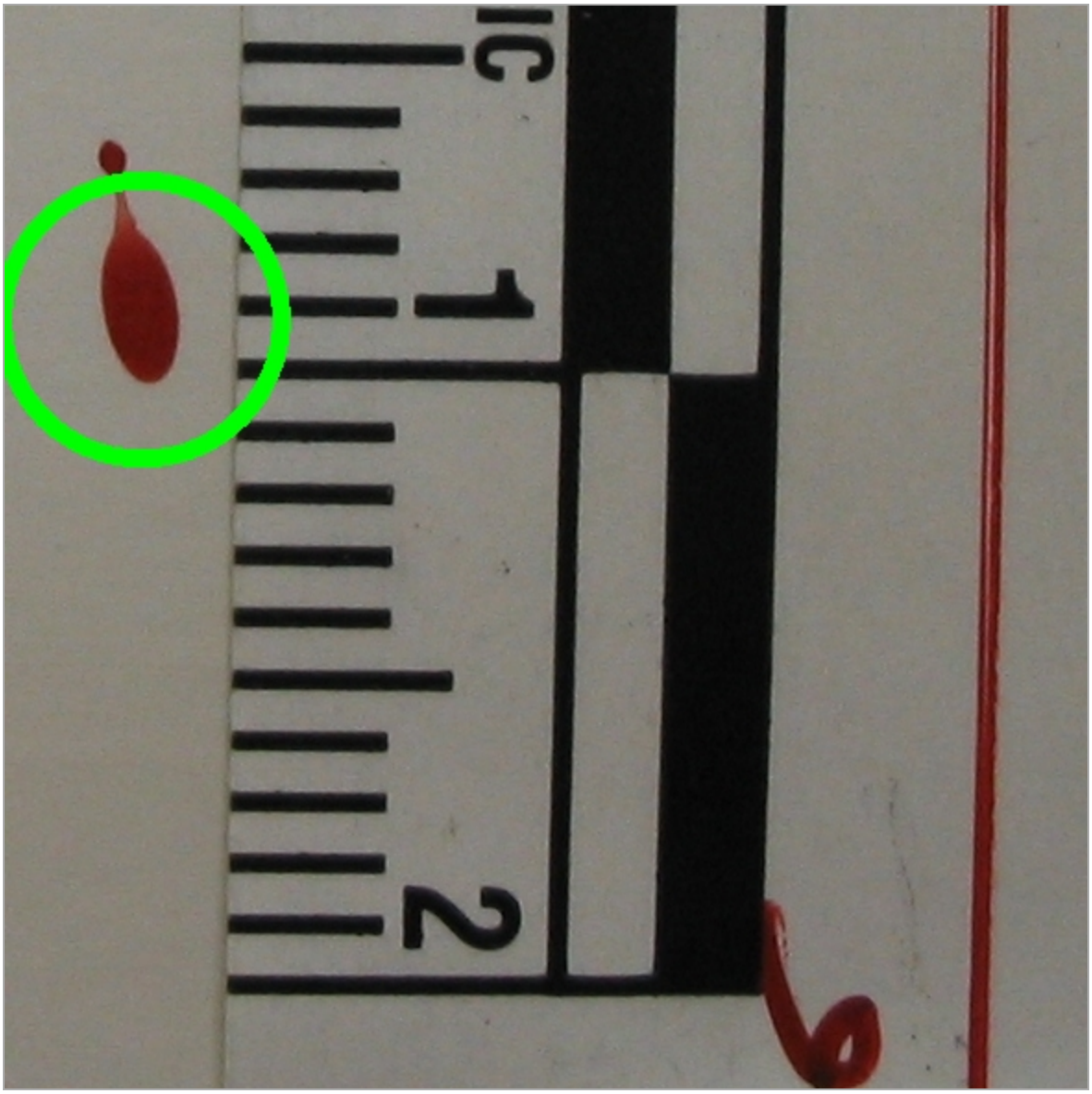
Minor axis length: 1.4 mm

Ellipse area: 2.8 mm^2

α (alpha): 36.0°

γ (gamma): −22.8°

A06 (Spatter Stain)



Surface: Angled

Location (x, y, z): (12.0, 262.0, 166.6) cm

Pattern: Pattern 1

Major axis length: 2.0 mm

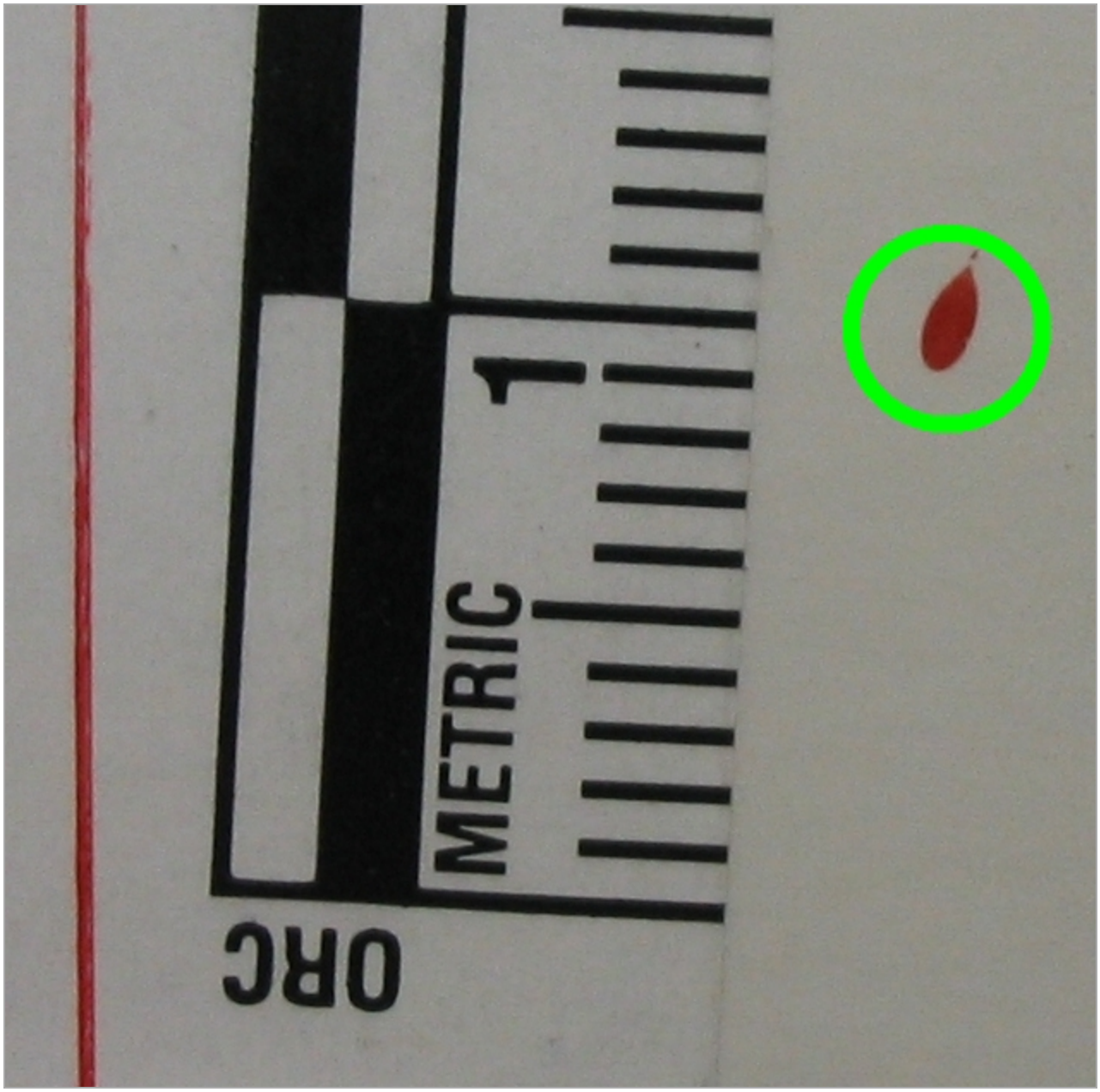
Minor axis length: 1.2 mm

Ellipse area: 1.9 mm^2

α (alpha): 36.2°

γ (gamma): −11.6°

A11 (Spatter Stain)



Surface: Angled

Location (x, y, z): (35.2, 283.6, 145.2) cm

Pattern: Pattern 1

Major axis length: 1.5 mm

Minor axis length: 0.8 mm

Ellipse area: 0.9 mm^2

α (alpha): 34.1°

γ (gamma): 21.9°

A15 (Spatter Stain)

Surface: Angled

Location (x, y, z): (41.5, 289.5, 152.5) cm

Pattern: Pattern 1

Major axis length: 2.8 mm

Minor axis length: 1.5 mm

Ellipse area: 3.2 mm^2

α (alpha): 31.4°

γ (gamma): 29.8°

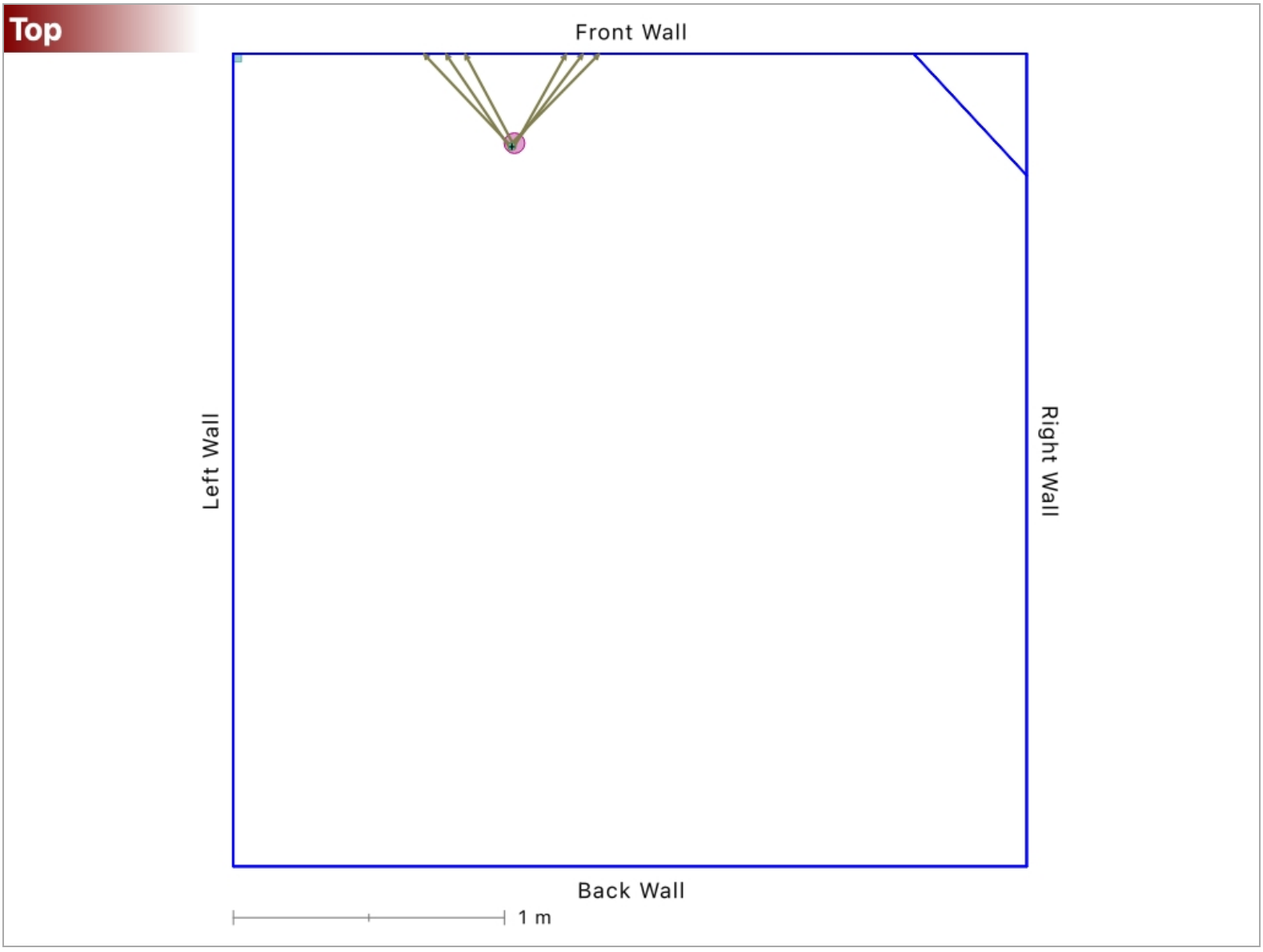
Pattern 2 (Impact Pattern)

Pattern 2 is an *Impact Pattern* which was analyzed using **6 bloodstains** on the Front Wall. These stains resulted in **9 x-y intersections** used to calculate the origin and **6 stains** were included in the height calculation.

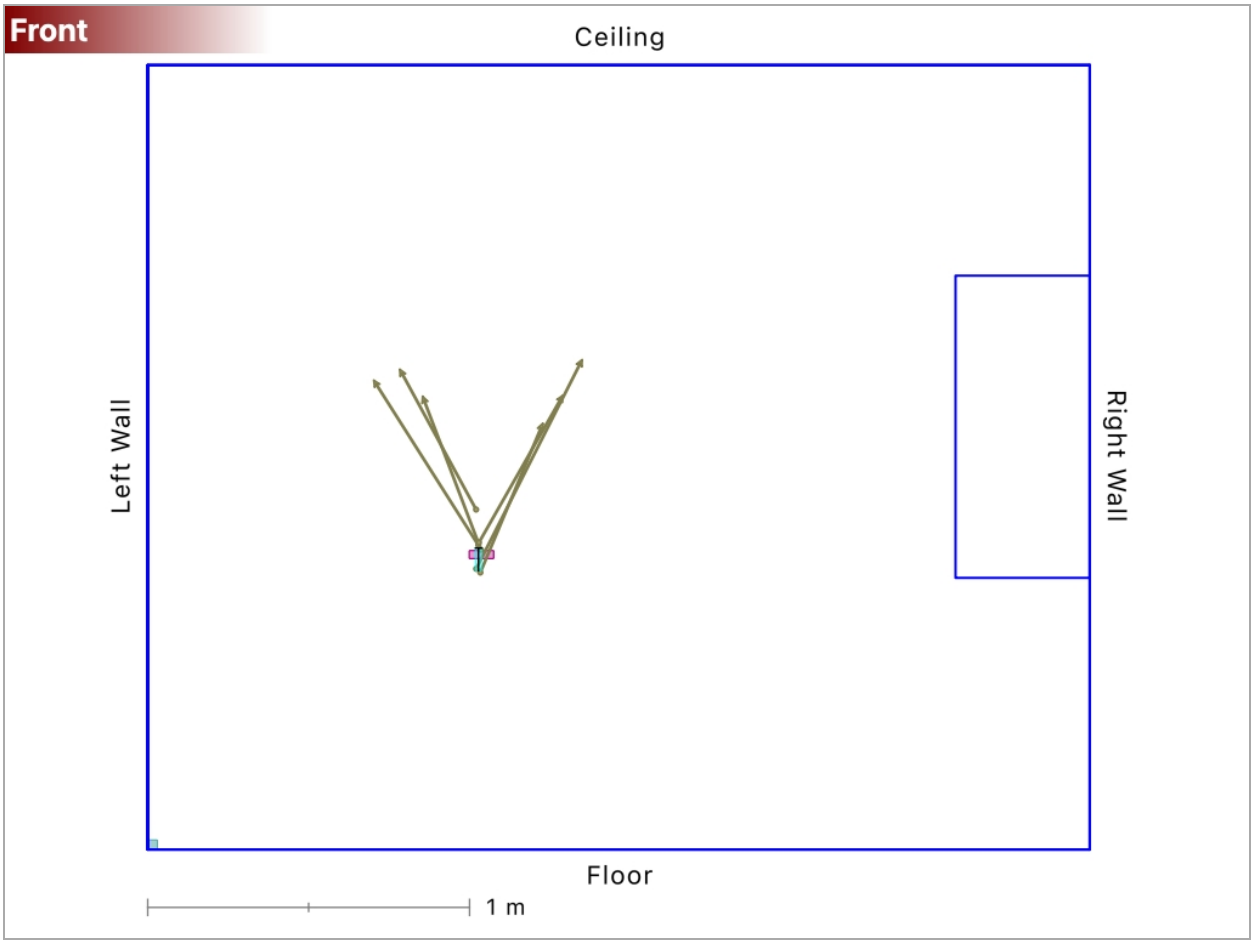
The *minimum* x, y, and z were **(32.8, 101.6, 86.2) cm**. The *maximum* x, y, and z were **(35.8, 103.7, 105.8) cm**.

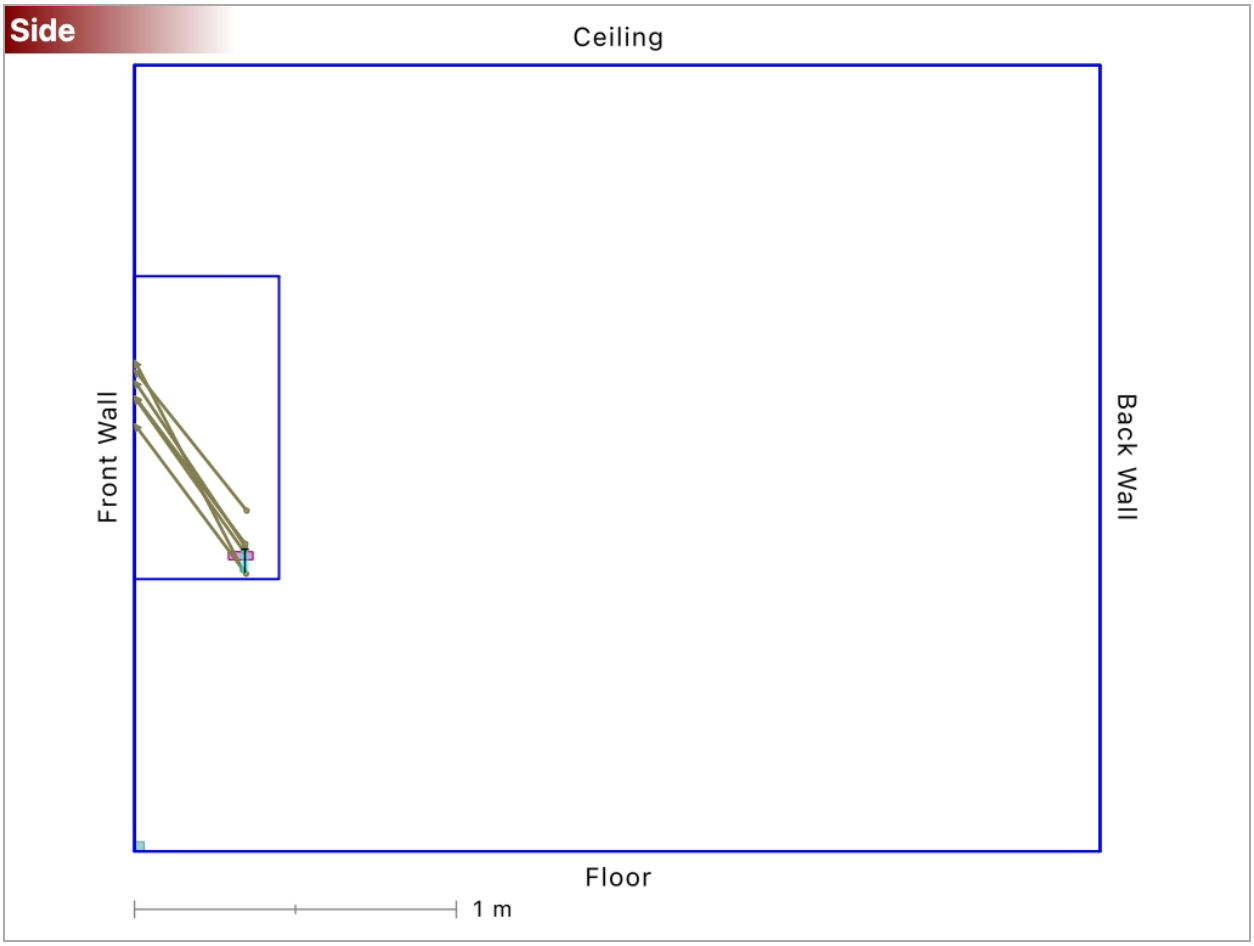
The *area of origin* (x, y, z) was determined to be **(34.3, 102.8, 93.8) cm** with a standard deviation of **(0.9, 0.7, 7.0) cm**.

This project is an experiment. The known origin (x, y, z) of this pattern is **(33.0, 103.7, 93.0) cm**. The distance from the known origin to the calculated origin is **1.8 cm**. The distance for each axis is **(1.3, 0.9, 0.8) cm**.



Pattern 2 (Impact Pattern)

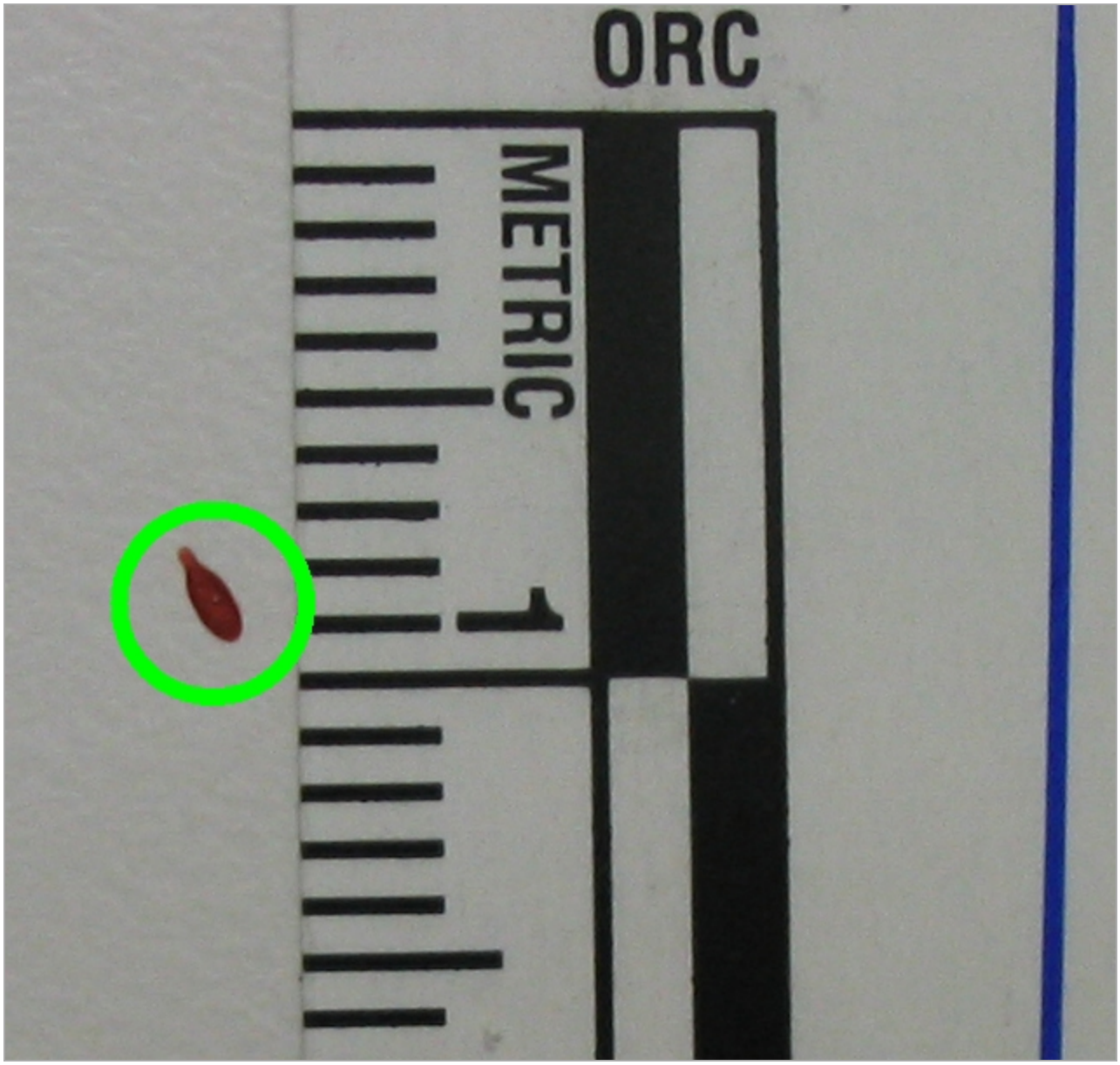




Pattern 2 (Impact Pattern) - Summary

Stain	Surface	Location (x, y, z) (cm)	Major (mm)	Minor (mm)	Area (mm^2)	α (°)	γ (°)
B01	Front Wall	0.0, 70.2, 146.0	1.5	0.8	0.9	29.5	−32.4
B04	Front Wall	0.0, 78.3, 149.4	1.7	1.0	1.3	35.0	−28.5
B08	Front Wall	0.0, 85.4, 141.0	1.6	0.9	1.1	33.6	−20.8
B11	Front Wall	0.0, 122.8, 132.6	1.7	1.0	1.4	34.6	22.7
B16	Front Wall	0.0, 129.0, 141.3	1.5	0.8	1.0	33.2	29.7
B19	Front Wall	0.0, 135.0, 152.4	1.6	0.7	0.9	24.8	26.8

B01 (Spatter Stain)



Surface: Front Wall

Location (x, y, z): (0.0, 70.2, 146.0) cm

Pattern: Pattern 2

Major axis length: 1.5 mm

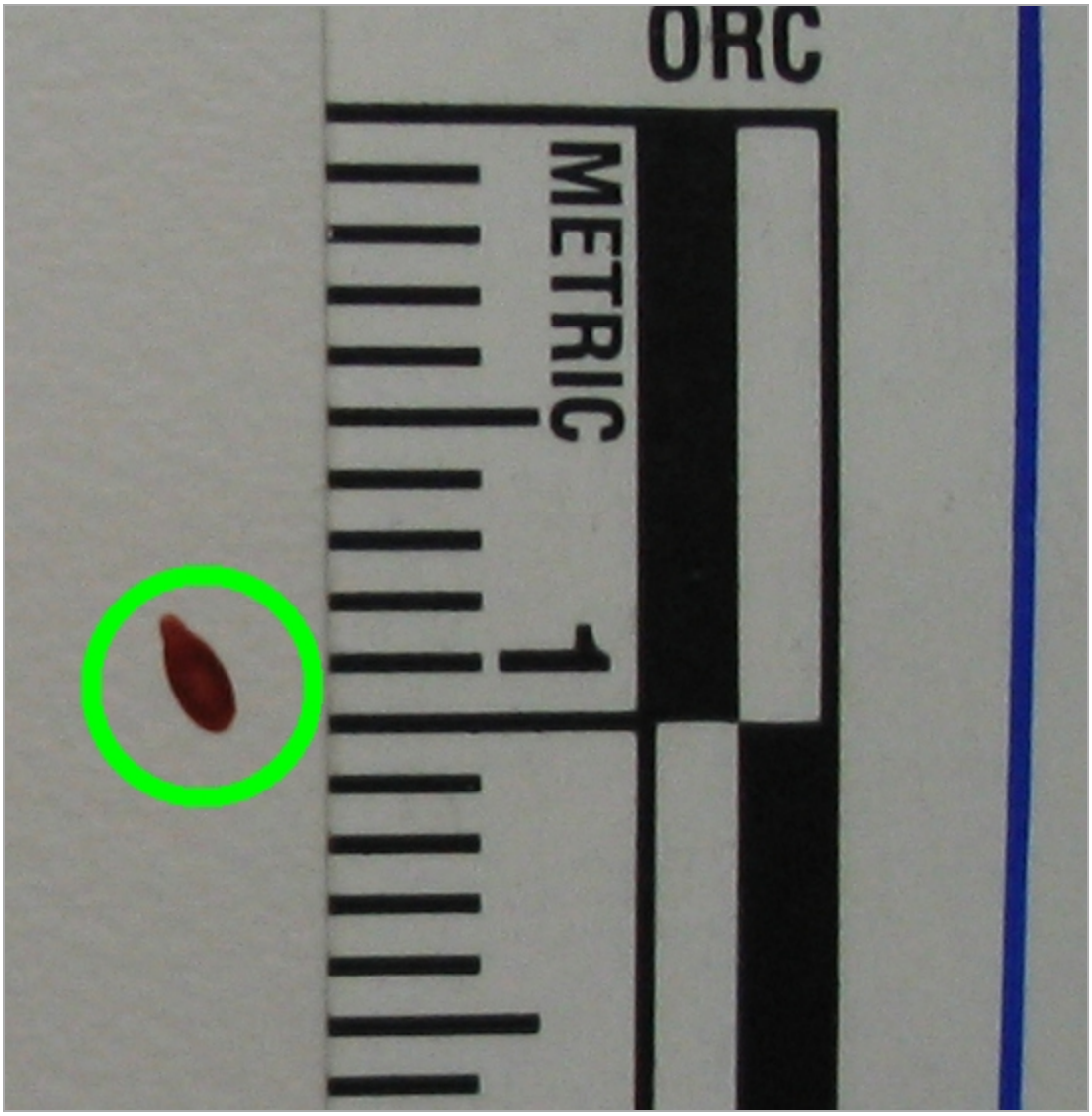
Minor axis length: 0.8 mm

Ellipse area: 0.9 mm^2

α (alpha): 29.5°

γ (gamma): −32.4°

B04 (Spatter Stain)



Surface: Front Wall

Location (x, y, z): (0.0, 78.3, 149.4) cm

Pattern: Pattern 2

Major axis length: 1.7 mm

Minor axis length: 1.0 mm

Ellipse area: 1.3 mm^2

α (alpha): 35.0°

γ (gamma): −28.5°

B08 (Spatter Stain)

Surface: Front Wall

Location (x, y, z): (0.0, 85.4, 141.0) cm

Pattern: Pattern 2

Major axis length: 1.6 mm

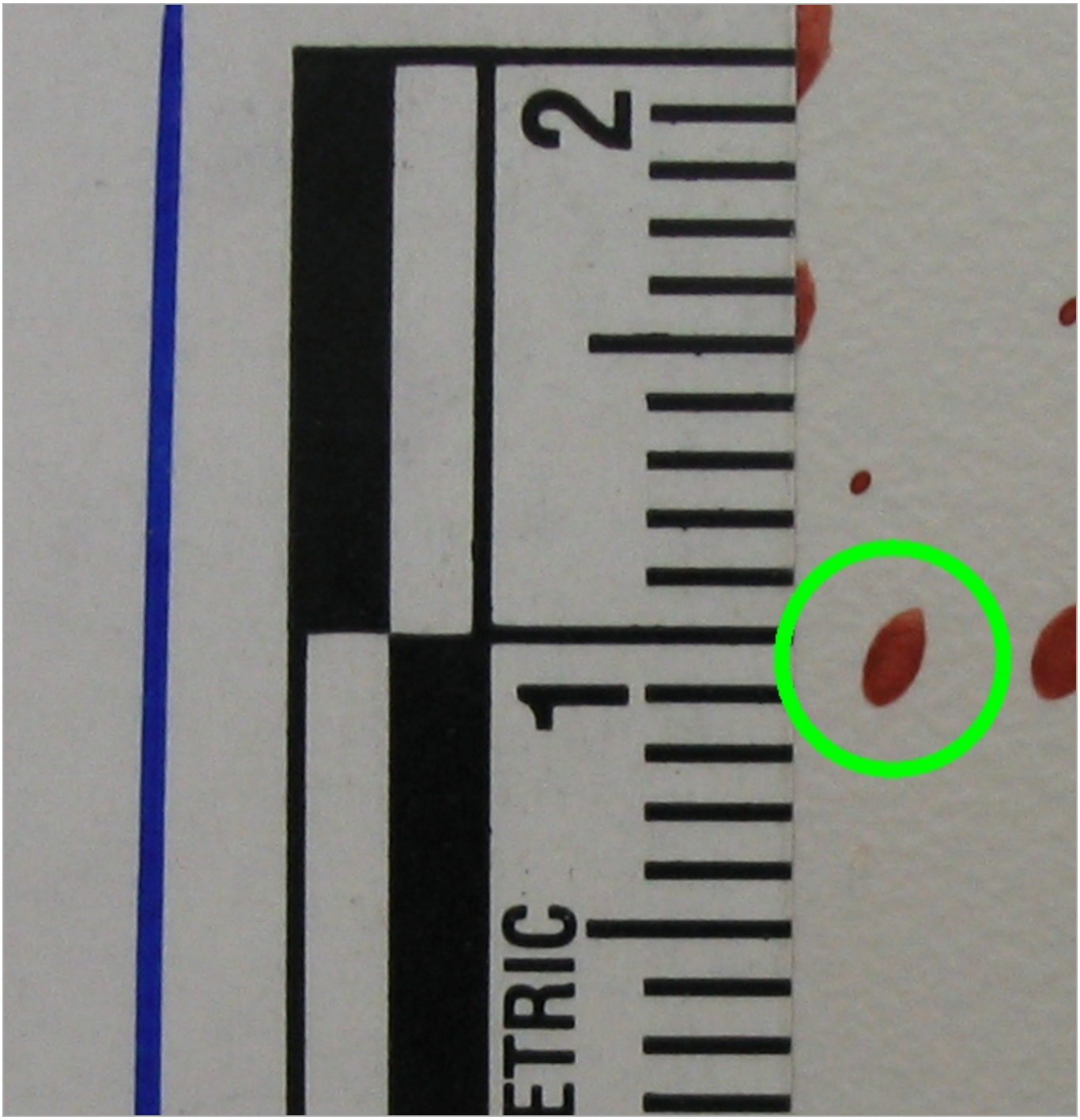
Minor axis length: 0.9 mm

Ellipse area: 1.1 mm^2

α (alpha): 33.6°

γ (gamma): −20.8°

B11 (Spatter Stain)



Surface: Front Wall

Location (x, y, z): (0.0, 122.8, 132.6) cm

Pattern: Pattern 2

Major axis length: 1.7 mm

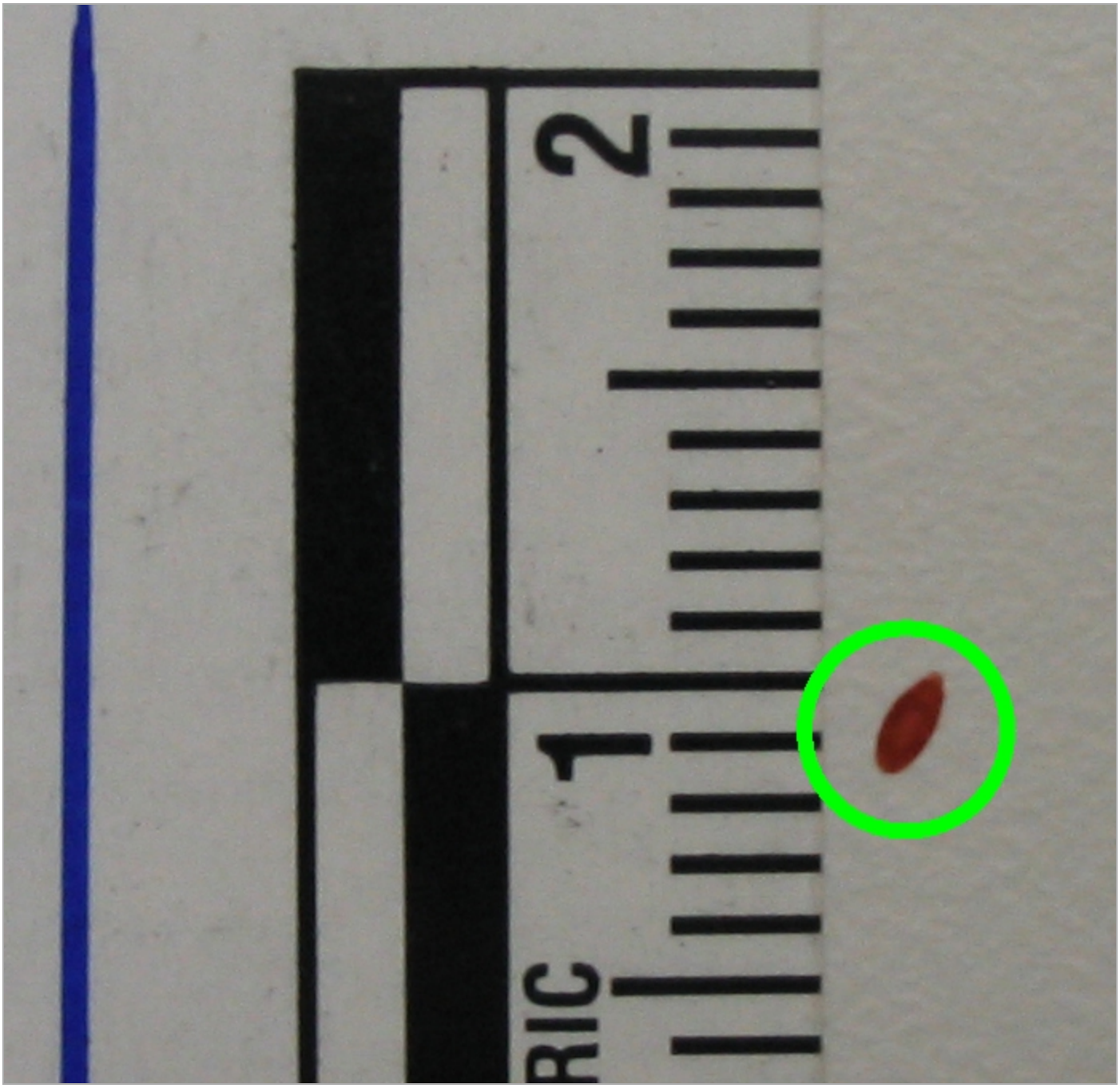
Minor axis length: 1.0 mm

Ellipse area: 1.4 mm^2

α (alpha): 34.6°

γ (gamma): 22.7°

B16 (Spatter Stain)



Surface: Front Wall

Location (x, y, z): (0.0, 129.0, 141.3) cm

Pattern: Pattern 2

Major axis length: 1.5 mm

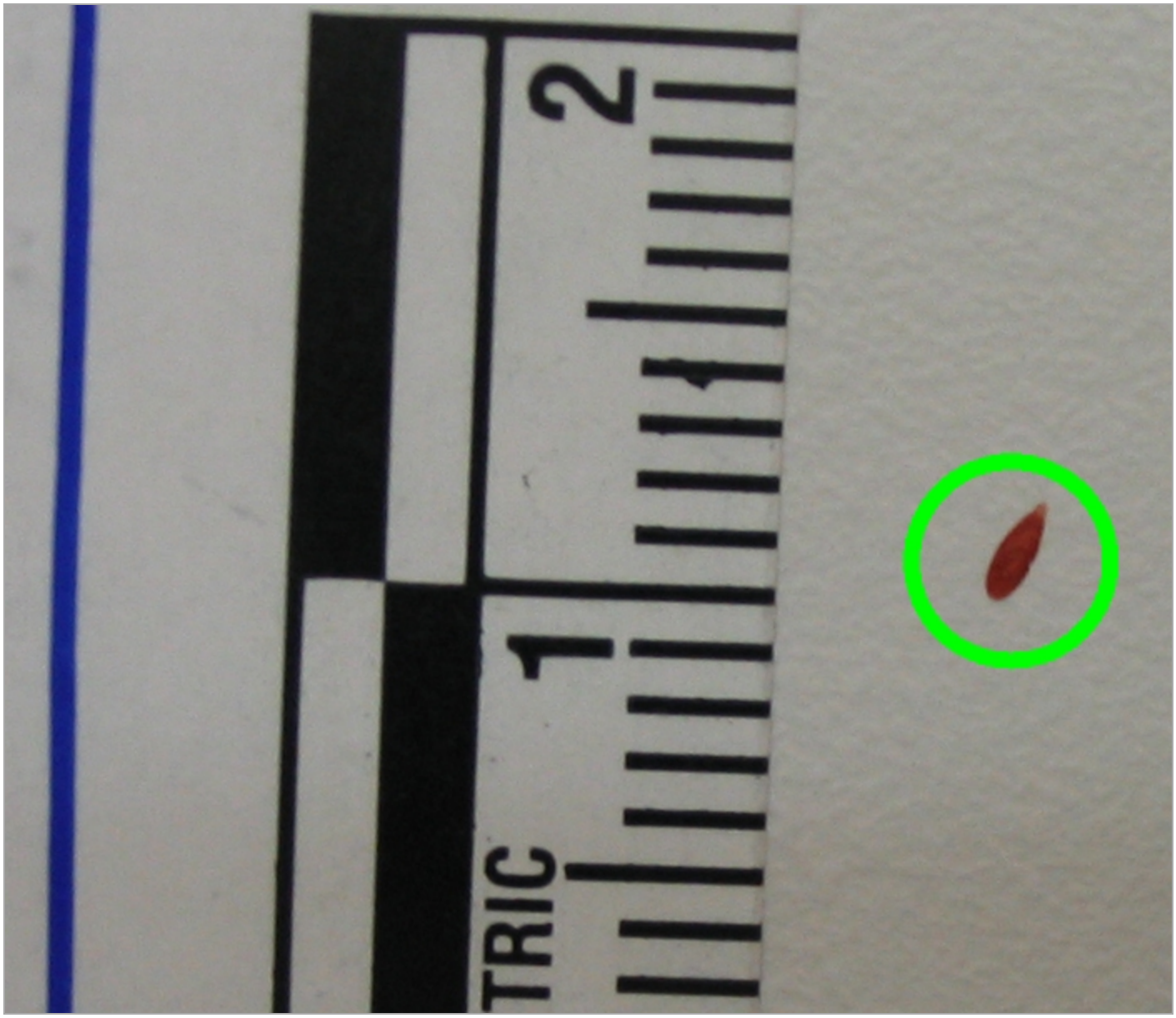
Minor axis length: 0.8 mm

Ellipse area: 1.0 mm^2

α (alpha): 33.2°

γ (gamma): 29.7°

B19 (Spatter Stain)



Surface: Front Wall

Location (x, y, z): (0.0, 135.0, 152.4) cm

Pattern: Pattern 2

Major axis length: 1.6 mm

Minor axis length: 0.7 mm

Ellipse area: 0.9 mm^2

α (alpha): 24.8°

γ (gamma): 26.8°

Terminology

The following terms are defined by the Scientific Working Group On Bloodstain Pattern Analysis (SWGSTAIN) recommended terminology list.

Angle of Impact

The acute angle (alpha), relative to the plane of a target, at which a blood drop strikes the target.

Area of Origin

The three-dimensional location from which spatter originated.

Bloodstain

A deposit of blood on a surface.

Bloodstain Pattern

A grouping or distribution of bloodstains that indicates through regular or repetitive form, order, or arrangement the manner in which the pattern was deposited.

Directionality

The characteristic of a bloodstain that indicates the direction blood was moving at the time of deposition.

Directional Angle

The angle (gamma) between the long axis of a spatter stain and a defined reference line on the target.

Impact Pattern

A bloodstain pattern resulting from an object striking liquid blood.

Spatter Stain

A bloodstain resulting from a blood drop dispersed through the air due to an external force applied to a source of liquid blood.