

Collaborative Testing Services, Inc. FORENSIC TESTING PROGRAM

## Manufacturer's Information Test No. 23-5601/5: Bloodstain Pattern Analysis

Each sample set contained the following images: Angle of Impact Determination Stains A - E (Item 1), Pattern Description: Single Pattern Recognition (Items 2, 3, and 4), and Pattern Description: Recognition and Description (Item 5) provided in photographic (5601) or digital download (5605) form. Participants were requested to determine the angle of impact of Stains A - E (Item 1), identify the pattern for Items 2 - 4, and write a brief description of the pattern(s) for Item 5.

SAMPLE SET ASSEMBLY: Photographs were produced for the photographic test, placed into a pre-labeled sample set envelope and sealed. Digital download media were provided as a zipped file on the CTS Portal.

VERIFICATION: The laboratories that conducted the predistribution examination of the Angle of Impact stains reported consistent results for each of the Angle of Impact Stains A - E, and their findings were comparable to the preparation angles. The pattern descriptions reported by predistribution laboratories correlated to the descriptions of how the patterns were created for Items 2-5.

## ANGLE OF IMPACT DETERMINATION

Item 1: For each angle of impact stain, human whole blood was released from a pipette at a height of approximately thirty-six inches above the impact surface. White poster board targets were placed on an inclined plane at the following predetermined angles from the vertical:

<u>Stain</u>	Preparation Angle
А	15.4°
В	18.1°
С	23.1°
D	20.9°
E	26.1°

Please note that the Preparation Angle is the value used for the test preparation phase and may not necessarily represent the final angle of the drops. It is advised to wait for the Grand Mean statistics available in the Summary and Individual Reports before evaluating performance.

The information presented here details how test samples were prepared as well as any design specifications. This information does not necessarily represent the answers that should or could be obtained from an examination of the sample(s). Final interpretation of the results should be deferred until the summary report is available.

## Manufacturer's Information, continued Test No. 23-5601/5: Bloodstain Pattern Analysis

## PATTERN DESCRIPTION

- Item 2: A gloved hand, coated in human whole blood, was pressed in the center of the target and then lifted.
- Item 3: A small volume of human whole blood was deposited onto the target, and a closed, gloved fist hit the pool of blood.
- Item 4: A screwdriver coated in human whole blood was swung downward toward the target.
- Item 5: The blade of a knife was coated in human whole blood and then swung toward the target. The stains were allowed to partially dry before a gloved finger moved through several stains. Then the bottom of a sandal coated in blood was placed in the corner of the target.

The information presented here details how test samples were prepared as well as any design specifications. This information does not necessarily represent the answers that should or could be obtained from an examination of the sample(s). Final interpretation of the results should be deferred until the summary report is available.