



Ron Smith & Associates, Inc.

Testing Division

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Summary Report

Fall 2018 Latent Comparison Print Proficiency Test #18102

Issued: November 13, 2018

On July 30, 2018, Ron Smith and Associates, Inc. (RS&A) shipped the Fall 2018 Latent Print Comparison Proficiency Test #18102. Participants were required to submit their responses no later than October 1, 2018 in order for them to be included in this summary report.

A total of 80 tests were ordered and shipped, with 70 participants returning their responses. **This summary report is based on 700 individual responses (70 participants returning 10 responses each).** The test was provided in both digital and/or hard copy format and included ten latent prints and four sets of known fingerprints and palm prints.

The results presented in this report reflect whether or not the participants' submitted results are consistent or inconsistent with the assigned values garnered from pre-distribution testing and outlined in *The Manufacturer's Report* (Appendix 1). The primary purpose of a Summary Report is to provide an overall documentation of all the submitted responses. It is RS&A's intention to go a step further by providing more meaningful statistical results through analyzing the submitted responses in relation to the demographics obtained from each of the examiners participating in this proficiency test. All results and statistics for Test #18102 will be outlined through graphs and charts found in the remainder of this report.

Prior to distribution of this test, all of the expected responses were determined to be either "Identification" or "Exclusion"; however, we are aware that some agencies allow for a conclusion of "Inconclusive" in their casework. In designing this Proficiency Test, there was no intention to force a participant to render a conclusion which goes beyond their considered opinion. To satisfy this option, participants were allowed to enter "Inconclusive" as a response. Due to the fact that a participant's "Inconclusive" response does not meet the assigned values, it will appear as an inconsistent response in the summary report and be incorporated as such in the statistical analysis. It will be up to each agency to decide if the participant's "Inconclusive" response qualifies as being acceptable under their policies and procedures.

RS&A strives to maintain the confidentiality of all of its clients and participants. All results are obtained and published using randomly generated test codes. RS&A will not release the identity of any participant without the written consent of the participant and/or the agency involved.

For any additional information, please contact the Latent Print Proficiency Test Coordinator at testing@ronsmithandassociates.com or call toll free at 1-866-832-6772.

Appendix 1

Test Manufacturer's Information

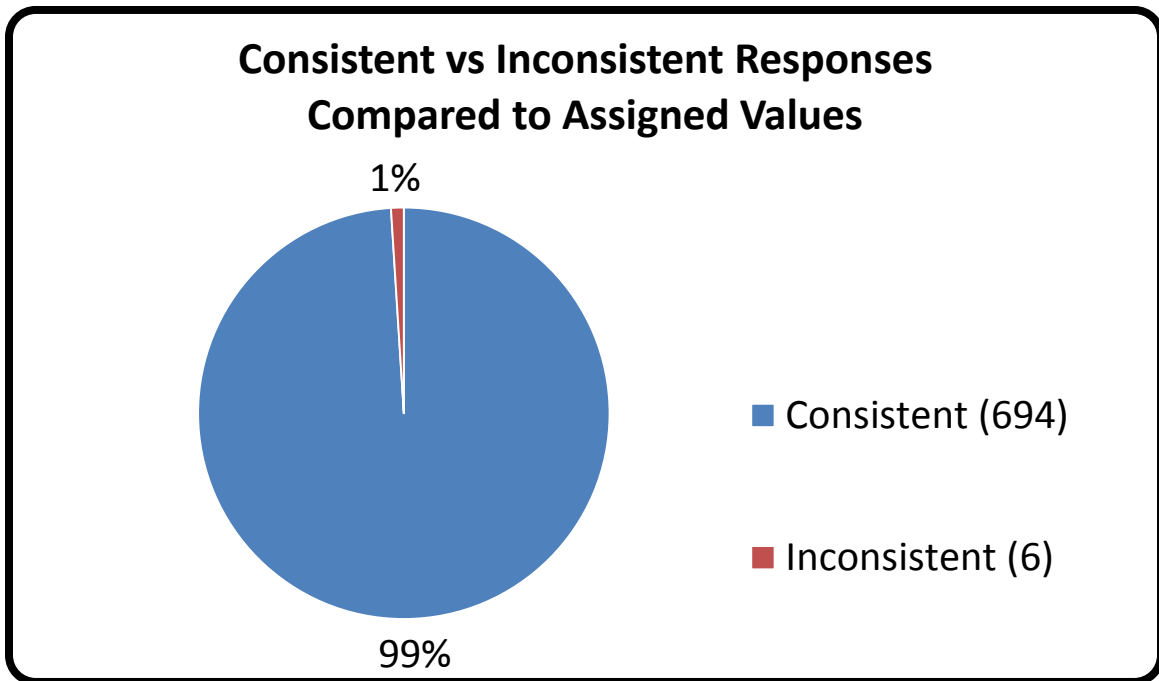
Fall 2018 Latent Print Comparison Proficiency Test #18102

This test consisted of ten latent prints and four sets of known fingerprints and palm prints. The assigned values are as follows:

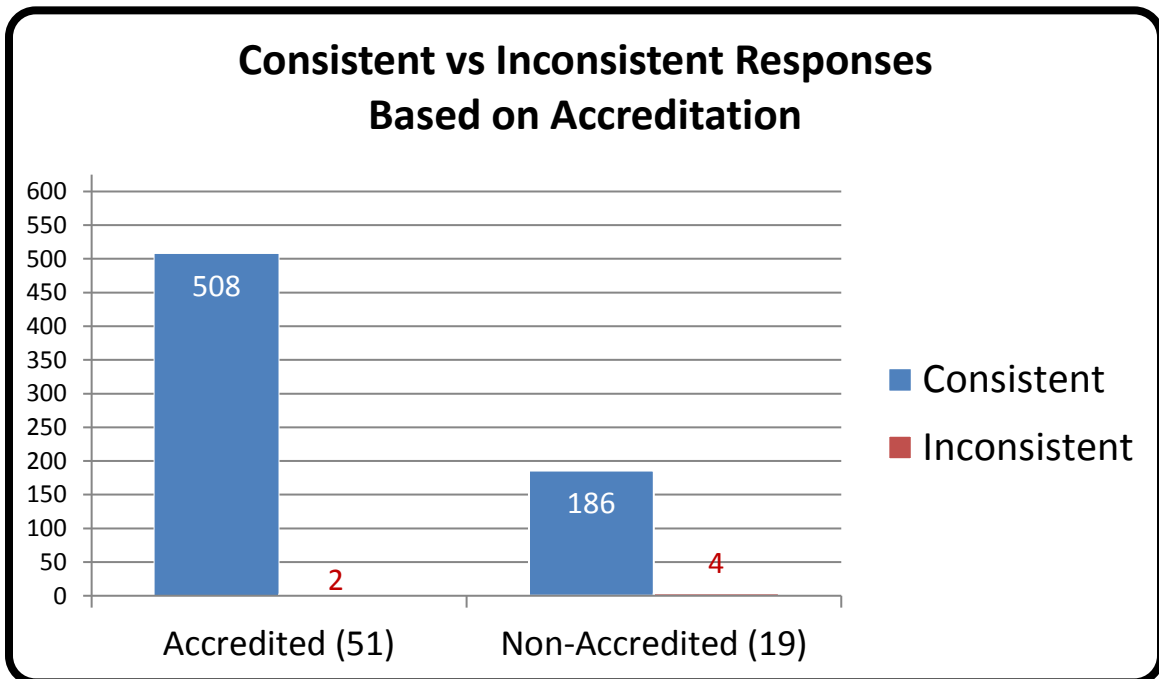
Latent Print Number	Conclusion	Subject Number	Specific Finger or Palm
L-1	Exclusion		
L-2	Identification	K-4	Right Ring
L-3	Identification	K-2	Right Index
L-4	Identification	K-3	Right Palm
L-5	Identification	K-2	Right Middle
L-6	Identification	K-2	Right Thumb
L-7	Identification	K-1	Left Index
L-8	Identification	K-1	Left Middle
L-9	Identification	K-3	Left Palm
L-10	Exclusion		

The test was provided in hard copy photograph and/or digital image formats. The assigned values were determined through the ground truth information and verified through unanimous agreement during pre-distribution testing.

Appendix 2



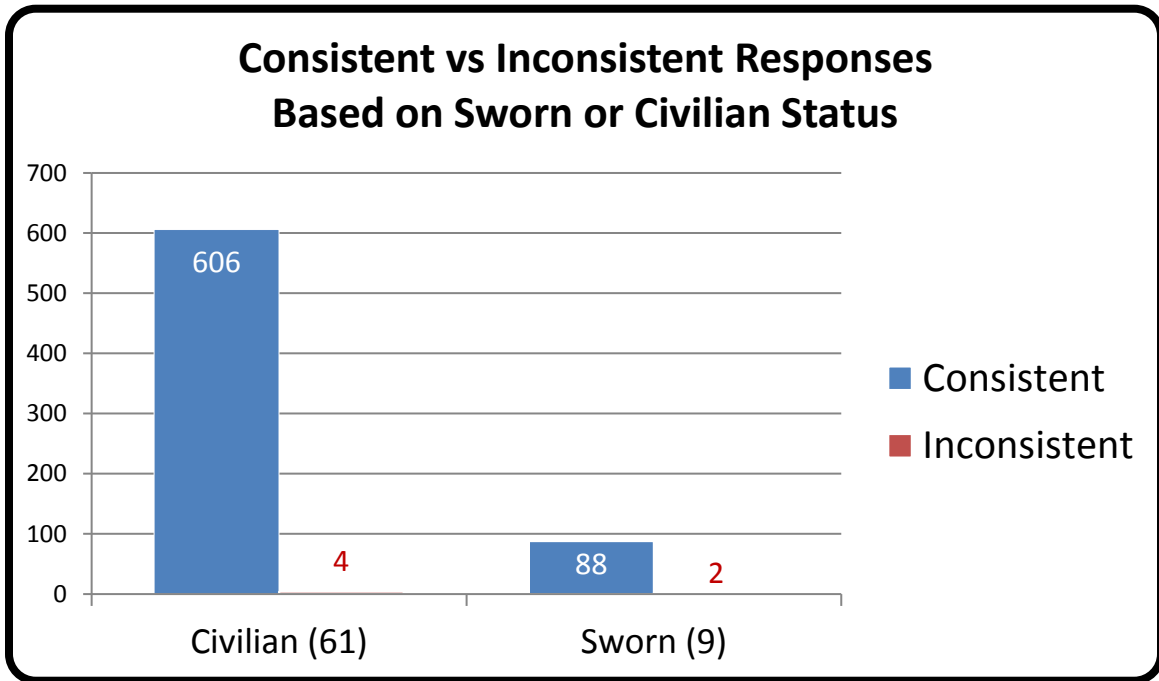
Appendix 3



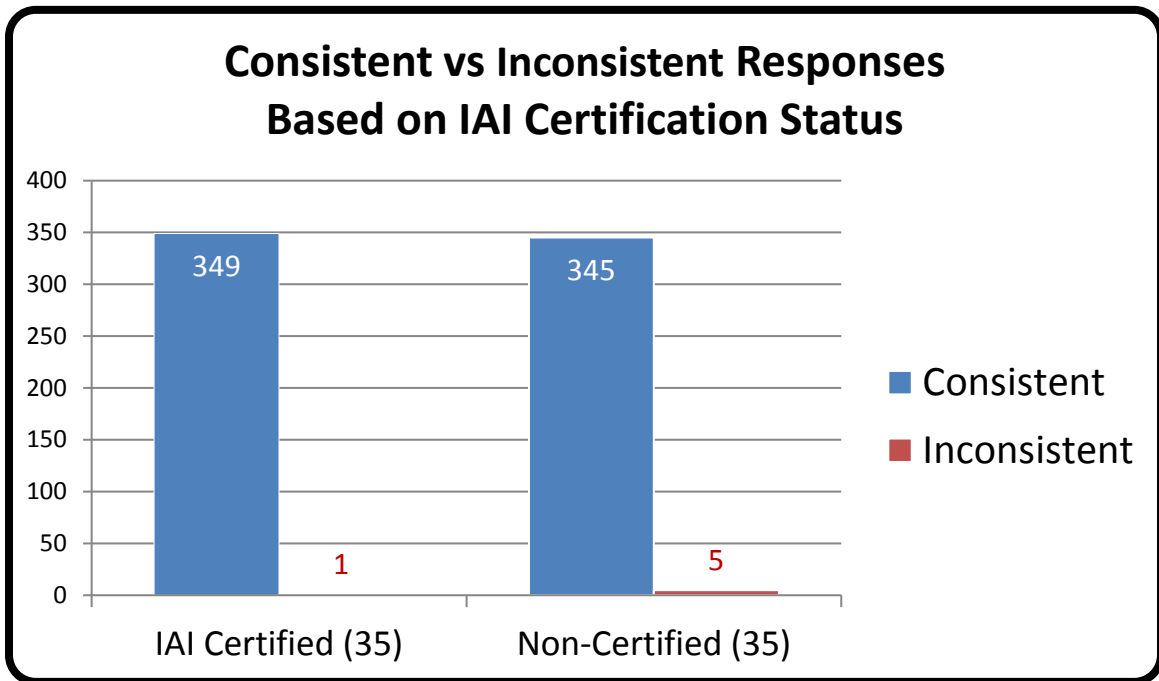
*Numerical values shown are based on **70 participant submissions** equaling **700 total responses**.

*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 4



Appendix 5

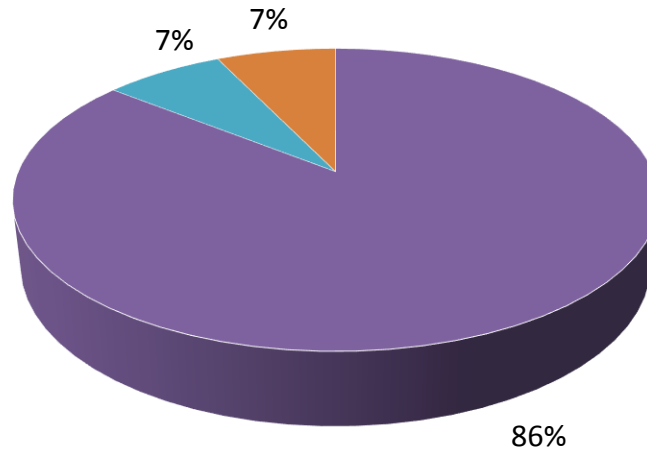


*Numerical values shown are based on **70 participant submissions** equaling **700 total responses**.

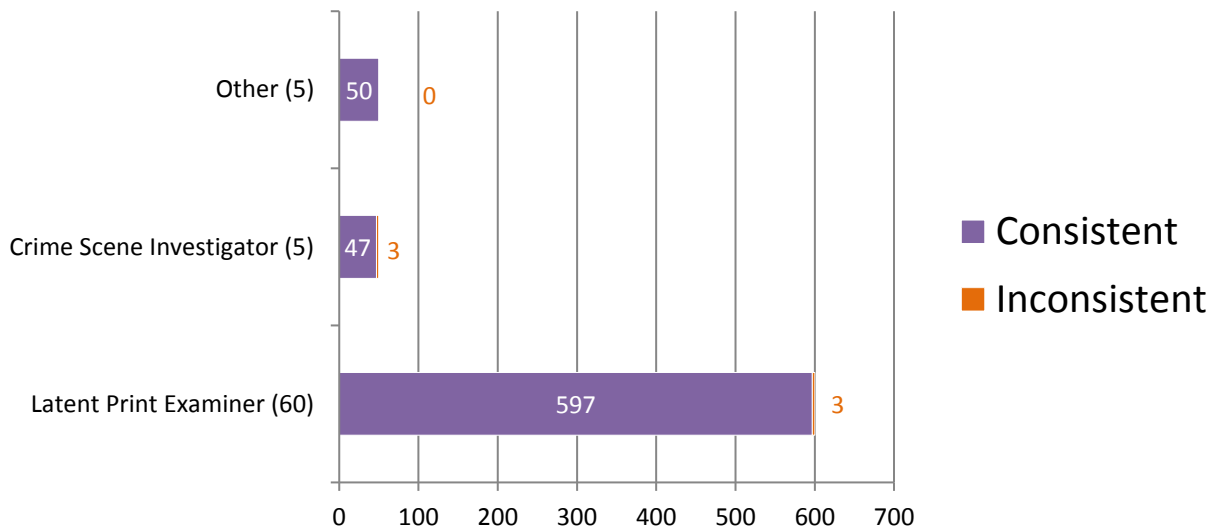
*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 6

Percentage of Participants Based on Primary Job Position



Consistent vs Inconsistent Responses Based on Primary Job Position

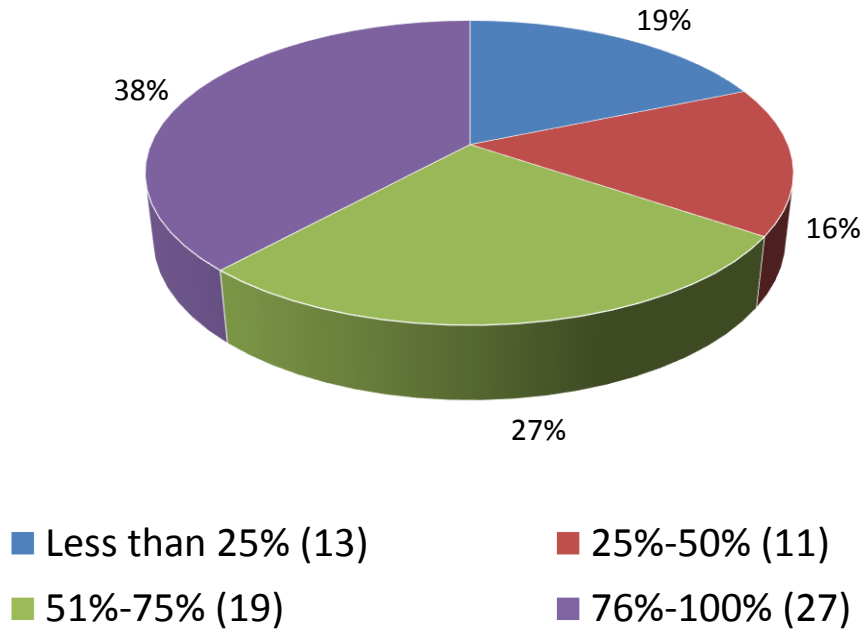


*Numerical values shown are based on **70 participant submissions** equaling **700 total responses**.

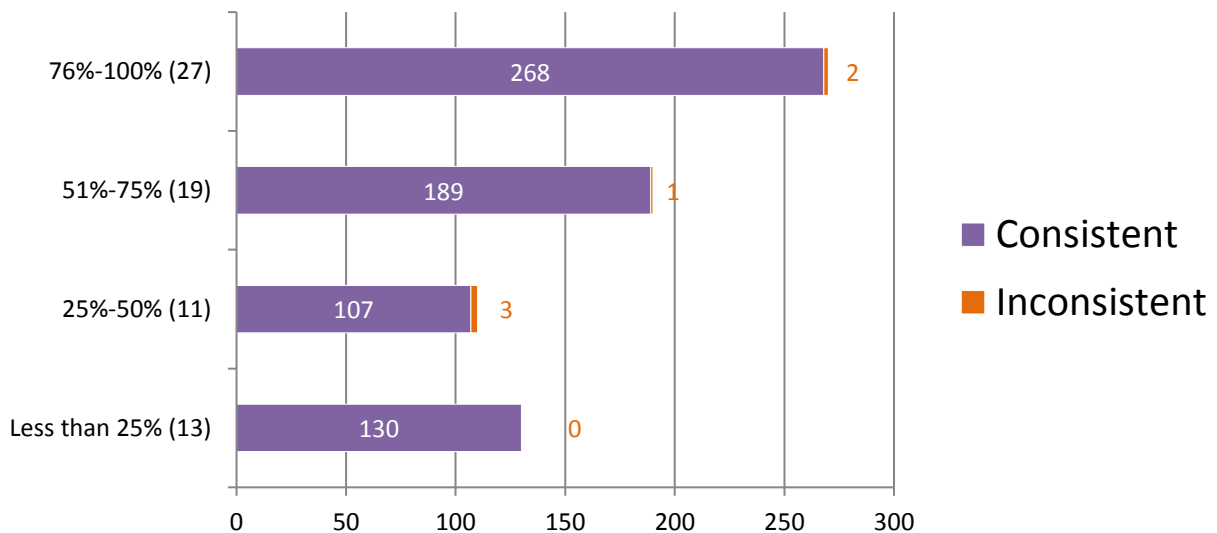
*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 7

Percentage of Participants Based on Time Devoted to Latent Print Casework



Consistent vs Inconsistent Responses Based on Time Devoted to Latent Print Casework

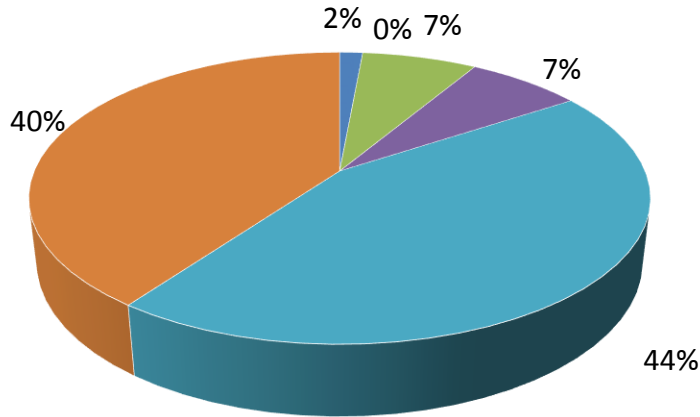


*Numerical values shown are based on **70 participant submissions** equaling **700 total responses**.

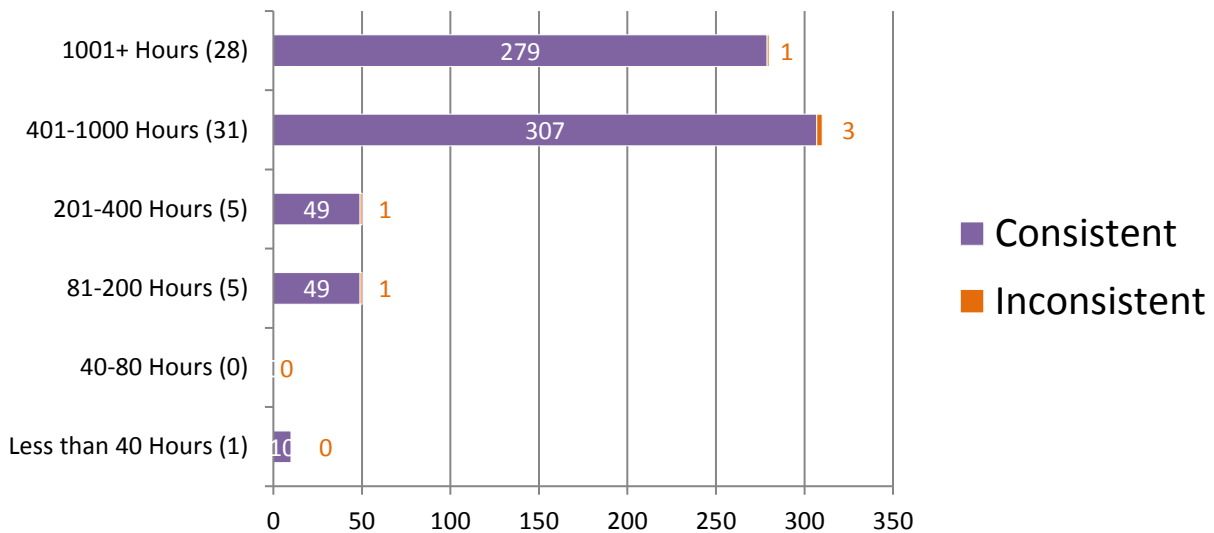
*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 8

Percentage of Participants Based on Hours of Latent Print Training Completed



Consistent vs Inconsistent Responses Based on Hours of Latent Print Training Completed

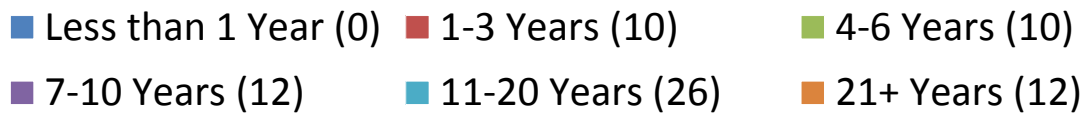
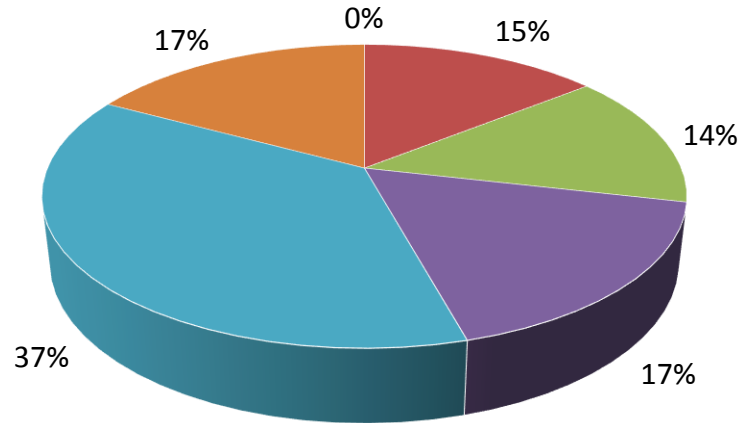


*Numerical values shown are based on **70 participant submissions** equaling **700 total responses**.

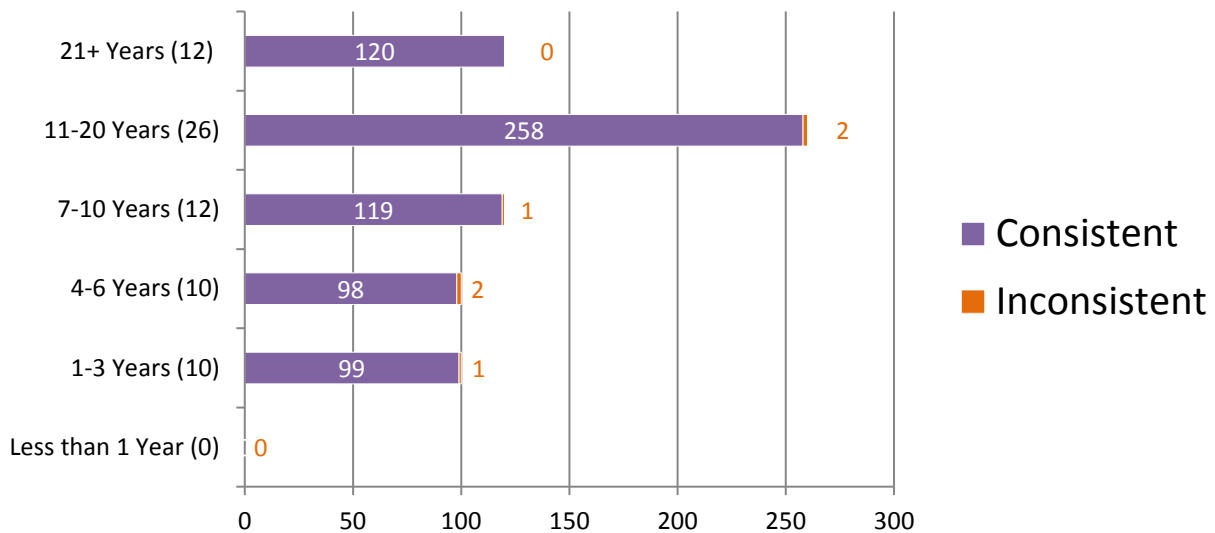
*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 9

Percentage of Participants Based on Years of Experience in Latent Prints



Consistent vs Inconsistent Responses Based on Years of Experience in Latent Prints

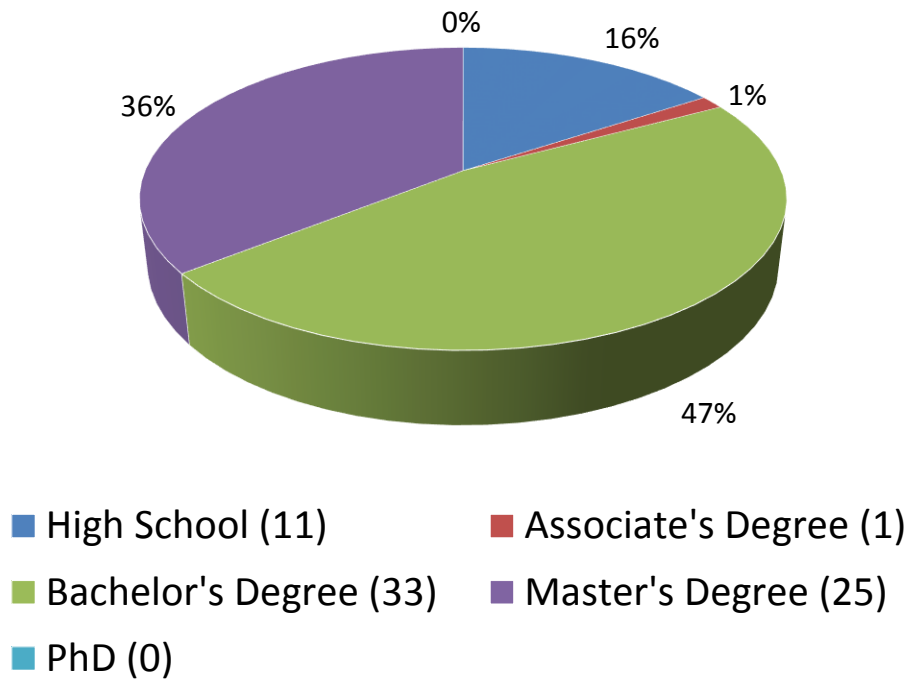


*Numerical values shown are based on **70 participant submissions** equaling **700 total responses**.

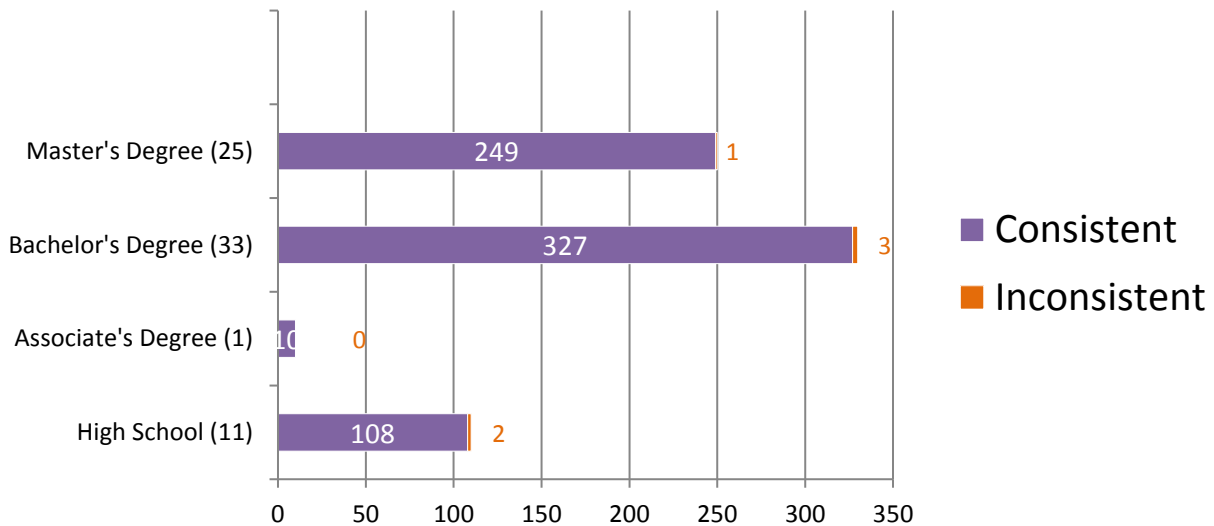
*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 10

Percentage of Participants Based on Highest Level of Education Completed



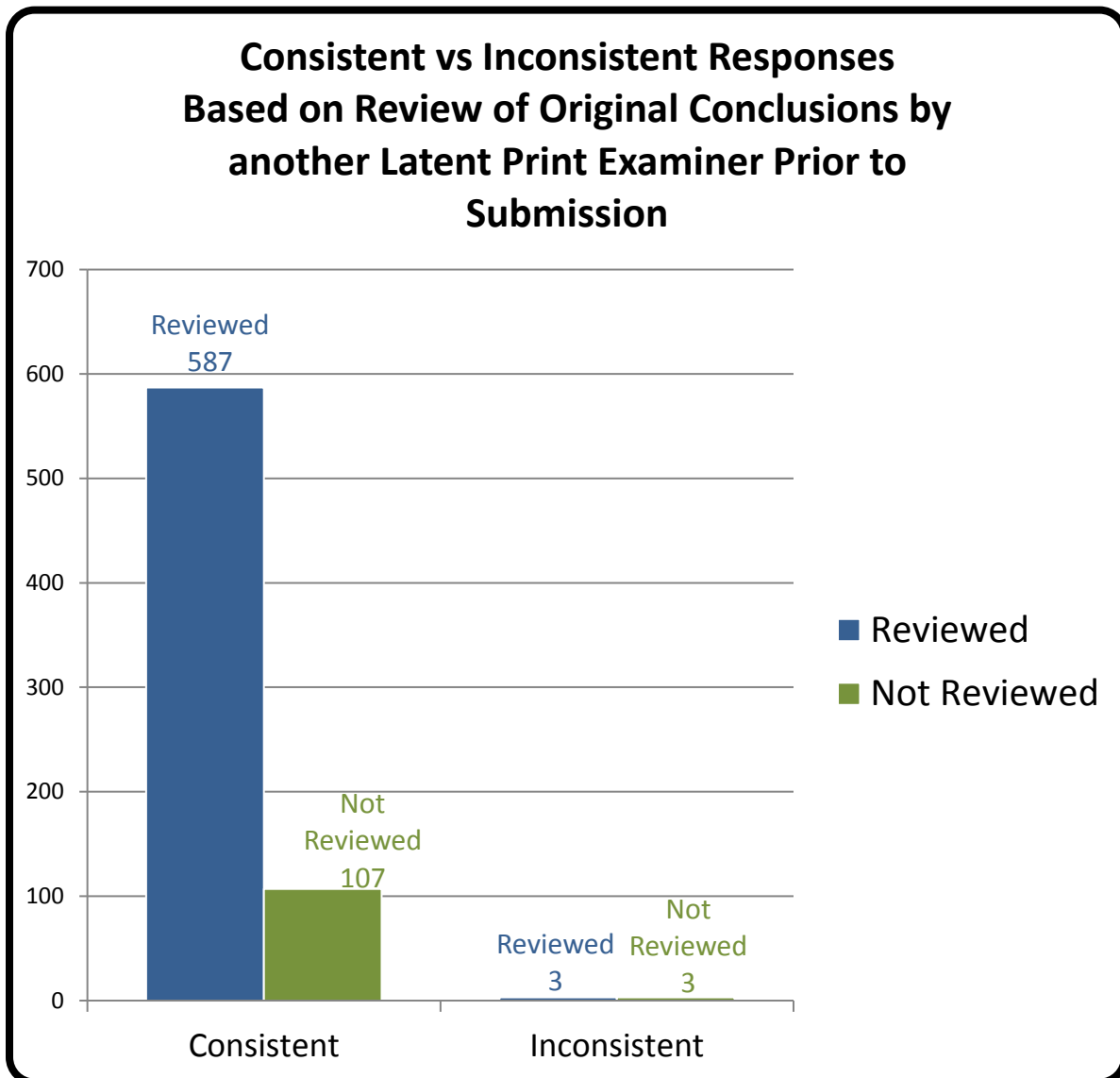
Consistent vs Inconsistent Responses Based on Highest Level of Education Completed



*Numerical values shown are based on **70 participant submissions** equaling **700 total responses**.

*For further information, please read ***Manufacturer's Additional Observations*** on the final page of this report.

Appendix 11



*Numerical values shown are based on **70 participant submissions** equaling **700 total responses**.

*For further information, please read **Manufacturer's Additional Observations** on the final page of this report.

Appendix 12

Participant Responses Listed by Test Code

Latent Print #	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8	L-9	L-10
Assigned Values	EXC	ID K-4 RR	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
2543V18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
3454B18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
6663K18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
7140M18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	EXC	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
5002S18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
9774U18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
9922Z18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
898M18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
6125K18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
2936D18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
6515J18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
7344O18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
3143E18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC

Latent Print #	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8	L-9	L-10
Assigned Values	EXC	ID K-4 RR	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
2179W18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
8370C18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
5465Y18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
894R18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
3355X18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
615D18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
8085L18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	EXC	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
7451M18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
9490L18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
995T18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
401J18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
3686D18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
2925V18102	INC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
8043E18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	INC
6992E18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC

Latent Print #	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8	L-9	L-10
Assigned Values	EXC	ID K-4 RR	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
9632K18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
8346L18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
1814B18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
3932K18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
7212D18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
2156W18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
8081X18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
9437F18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
2122X18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
9521K18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
7099T18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
324K18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
5670N18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
130N18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
281B18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC

Latent Print #	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8	L-9	L-10
Assigned Values	EXC	ID K-4 RR	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
2260P18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
8133U18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
9225Q18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
6022M18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
8175O18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
616W18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
8291W18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
9625E18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
497K18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
5101B18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
2447H18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
7718F18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
4074G18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
8272K18102	INC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
3353M18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC

Latent Print #	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8	L-9	L-10
Assigned Values	EXC	ID K-4 RR	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
6485L18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
2138O18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
533D18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
6119X18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
7394K18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
8878F18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
5004L18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
9608B18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
4040E18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
7461G18102	INC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
6063L18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
1814V18102	EXC	ID K-4 LT	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC

Totals

Latent Print #	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8	L-9	L-10
Assigned Values	EXC	ID K-4 RR	ID K-2 RI	ID K-3 RP	ID K-2 RM	ID K-2 RT	ID K-1 LI	ID K-1 LM	ID K-3 LP	EXC
Consistent Responses	67	70	70	70	70	68	0	0	0	69
Inconsistent Responses	3	0	0	0	0	2	0	0	0	1
Percentage of Consistent Responses	96%	100%	100%	100%	100%	97%	100%	100%	100%	99%

Participant's Additional Comments

Test ID	Comments
6515J18102	For L-1, I would also compare the friction ridge data to footprint exemplars.
7344O18102	During normal casework on L-1 I would have asked for better knowns on K4. Also for prints like L-10 I would have liked to have the writer's palms submitted to make sure the examination is fully evaluated.
8043E18102	Inconclusive result on L-10 - whilst I exclude K2 and K3, I cannot fully exclude K1 and K4. In order to comprehensively compare the right palms of K1 and K4, I would request the right palms to be retaken to capture detail missing on the prints provided (the 'chop' area of the hypothenar).
7718F18102	<p>Three of our certified latent print examiners took this test and felt that two of the palm standards were of extremely low quality in the interdigital region, which was needed for comparison with L1. All three examiners indicated on the test that in active casework they may have concluded an inconclusive result for L1, as better standards were needed. The low quality of the standards caused concerns as to the value of the test, as pushing examiners to form a conclusion is not necessarily a test of their proficiency. Inconclusive may be stated as a valid conclusion, however, analysts know that ID or EXC are supported in the testing environment.</p> <p>Since exclusions are where we make the most errors, many agencies are moving in the direction of more detailed procedures for exclusion determinations; including the necessity of comparison of two target groups, sufficient level two discrepancies be present, standards be of sufficient quality, known orientation and anatomical source, etc. Our concern is that L1 did not appear to support those trends in the community.</p>
8272K18102	L-1 Limited information in the known Impression.

Manufacturer's Additional Observations

Based upon a review of the seven hundred total submitted responses, the following observations were noted:

1. A total of seventy (70) participants representing seventeen (17) agencies/entities submitted responses to test 18102. Of those 17 agencies, a total of only one (1) agency submitted responses inconsistent with our assigned values.
2. The total number of inconsistent responses was six (6) and these inconsistencies did not show a pattern and were spread across multiple demographics.

Authorized by: Ron Smith, President
Ron Smith and Associates, Inc.

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