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FORENSIC TESTING PROGRAM

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Latent Print Examination

Test No. 21-5161/5 Summary Report

Each sample pack of this test contained one of the following: digitally produced photographs (21-5161) or directly downloadable digital images (21-5165) of twelve latent prints and four sets of known finger and palm imprints. Participants were asked to compare these items and report their findings. Data were returned from 333 participants: 165 for 21-5161, and 168 for 21-5165 and are compiled into the following tables:

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This report contains the data received from the participants in this test. Since these participants are located in many countries around the world, and it is their option how the samples are to be used (e.g., training exercise, known or blind proficiency testing, research and development of new techniques, etc.), the results compiled in the Summary Report are not intended to be an overview of the quality of work performed in the profession and cannot be interpreted as such. The Summary Comments are included for the benefit of participants to assist with maintaining or enhancing the quality of their results. These comments are not intended to reflect the general state of the art within the profession.

Participant results are reported using a randomly assigned "WebCode". This code maintains participant's anonymity, provides linking of the various report sections, and will change with every report.

Manufacturer's Information

Each sample pack contained either photographs or digital images consisting of known finger and palm imprints of four individuals and twelve latent "crime scene prints". Ten of the twelve latent prints were made by individuals for whom inked imprints were provided; two were from an individual for whom inked prints were not provided.

SAMPLE PREPARATION: All inked known fingerprints and powder-dusted or ninhydrin developed latent prints were scanned directly into image editing software. Images were assembled onto test templates, and background noise of each latent print was digitally reduced. For the physical photographs, the latent prints were provided in 1X and 2X magnification. Ninhydrin latent prints were provided in both full color and greyscale versions.

VERIFICATION: The expected Identification and Not Identified responses were reported by the predistribution examiners.

SAMPLE PACK ASSEMBLY: Once verification was complete and sample preparation was done, each photo set was packaged and sealed. Digital download media were zipped and uploaded to the CTS portal.

Latent No.	Print Source
Q1	Item B, Right Thumb (B, RT)
Q2	Item A, Right Index (A, RI)
Q3	Not Provided, - (NI)
Q4	Item D, Right Palm (D, RP)
Q5	Item C, Left Middle (C, LM)
Q6	Item A, Left Index (A, LI)
Q7	Item C, Right Middle (C, RM)
Q8	Item D, Left Thumb (D, LT)
Q9	Item B, Left Palm (B, LP)
Q10	Item A, Left Ring (A, LR)
Q11	Not Provided, - (NI)
Q12	Item B, Left Thumb (B, LT)

Summary Comments

This test was designed to allow participants to assess their proficiency in the identification of latent finger and palm prints. Ten latent prints (Q1, Q2, Q4-Q10, Q12) were made by one of the four individuals for whom inked prints were provided (Items A-D). Two latent prints (Q3, Q11) were from an individual for whom inked prints were not provided (Refer to the Manufacturer's Information for preparation details).

Of the 333 responding participants, 302 (91%) reported the expected ten identifications and two non-identifications. There were thirty-one participants who reported inconsistent or incomplete results for one or more of the latent prints; however, the necessary consensus threshold was achieved for each individual print. Outliers to the consensus are described as follows, with the types of outlying responses provided in parentheses following each description.

There were five participants who attributed a latent to a different individual, finger, or palm than that established by the consensus (Other Identifications). There were twenty-five participants who did not identify one or more latent prints for which known exemplars were provided (Not Identified). Within those twenty-five, one participant also attributed a latent to a different individual, finger, or palm than that established by the consensus (Other Identifications and Not Identified). Finally, one participant did not provide a response for Q11.

The print with the most outliers reported was Q10; nineteen participants reported this item as a non-identification print, and two participants identified it to a different finger of the contributing individual. Additional comments from several participants indicated that the limited minutiae of the latent print hindered their confidence in making an identification. Participants also remarked on the limited value and quality of Q12 for comparison, but consensus results were still above 98% for this print. Outlier responses were reported for eight of the twelve latent prints in the test.

Latent Print Identifications

TABLE 1

WebCode-Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
23K89M-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
24X4UE-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
28CCZ6-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
28VHYV-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2ALERX-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2CVW29-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2GLZJX-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2K6X7Z-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2LGZA8-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2NZPDX-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2RN2D3-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2U7FMW-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2V22AU-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2Y2AE6-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2ZEAQL-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
2ZGAXU-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
32LGDR-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
34Q7MU-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
36LRAR-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
3C8KMC-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
3GKT2J-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
3GYR7K-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
3Q2C7R-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
3ZCERT-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
44AE6V-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
4B4KXW-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
4F6VAJ-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
4HQ8YV-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
4J486J-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
4KDCJ8-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, RL	NI	B, LT
4MHG3Z-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
4PUK88-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
4ZBYYV-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
644ENU-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
64NXPT-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
67DANX-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
68NCAW-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
69F4NQ- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
6DPJVT- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
6HMD69- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
6JD9CV- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
6K6VHL- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
6M2KBZ- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
6MG4VX- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
6MXNVH- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
6MZKGU- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
77PLGM- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
7CXC22- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
7CXM3Q- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
7ELN28- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
7EZM3N- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
7FXZNV- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
7N9PGG- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
7VAYNA- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
7XCDFL- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
86Q7Z4- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
88CK9Q- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
8CCYB4- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
8CP6GX- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
8GJ37N- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
8LEGM7- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
8LYW39- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
8XTGGE- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
926D7T- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
92LW7D- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
966RA6- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
96LLUT- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
9CGBQH- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
9EEETEJ- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
9FL9LP- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
9MNKHL- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
9MPH96- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
9RZ7QT- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
A24Z6K- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
A499PV- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
AAY9Y6- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
ACGZUK- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
AGFPRE- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
ALTYNV- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
AT9ZN6- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
ATBXC3- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
B7L4G8- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
B9DQ2U- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
B9Y6RR- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
BCHM36- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
BFZCDN- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
BGLU3F- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR		B, LT
BW6N3Q- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
BW8BGJ- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
BXVHFF- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	NI
BZ234F- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
BZN7D4- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
C2ERJZ- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
C2X8JF- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
C7PE3N-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CCFPCL-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CD96GB-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CDM4JR-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CEGQE6-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CG8J62-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CKAU6M-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CN9VZX-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CNA72M-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CUBHXK-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CWJXLY-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CWYUWQ-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CXDF9D-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
CYMT62-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
D27AJE-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
D2NQXL-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
D3JWAT-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
D4DMF8-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
D4V4MG-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
D66LEE- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RP	D, LT	B, LP	A, LR	NI	B, LT
D7JKVM- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
D9QZ6E- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
DGL6E3- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
DJ7UHT- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
DLHUVA- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
DLWHV2- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
DLWTWQ- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
DNNEKV- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
DR3LQM- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
DUA8WU- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
E8A3CE- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
E9QMDY- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
EBTXDL- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
EC7UJQ- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
ECN4PT- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
EDHUV8- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
EVA3DB- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
F3X6CT- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
F46WBE-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
F62AVL-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
F7GWMV-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
FB97XT-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
FBNZHGX-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
FGUTCC-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
FHMPYK-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
FJZPWA-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
FLB2XQ-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
FPPVEN-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
FVWTFV-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
FW9XZR-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
G3TGGD-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
G9F82M-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
GCU69A-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
GG96LN-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
GM7Z2A-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
GPHFVA-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
GUYA3F-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
GVBCZT- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
GWVRXN- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
GZL28L- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
H2WQ4Q- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
H447BW- 5165	B, RT	NI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
H4JZ3D- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
H9UGKV- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
HBMCAN- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	NI	A, LR	NI	B, LT
HH4F6D- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
HJV4CR- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
HL4Q2C- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
HMUVRW- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
HNQ8BH- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
HWWCZE- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
HZ6VEW- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
HZFUBQ- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
J4E6PJ- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
J4VNP3- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
JJQJ8G- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
JK2FHE-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
JPDATC-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
JPW8QC-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
JRKNZH-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
JXBYAF-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
JY4H8U-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
K2QTQD-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
K3X9XJ-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
K47N86-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
K7G3ZB-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
K7WJTJ-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
K99PLU-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
K9MHDB-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
KAZKBN-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
KBDM4V-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
KF8N7A-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
KGE4DF-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
KLDHXJ-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
KRFQ6C-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
L3VWB-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
L6CVM3-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
LFGATG-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
LULWBT-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
LVERZM-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
M9GDK4-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
M9THR-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
MLLBQB-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
MQWLL6-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
MT7AJJ-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
MVQGKQ-5161	B, RT	A, RI	NI	D, RP	NI	A, LI	C, RM	D, LT	B, LP	NI	NI	NI
MW8BL2-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
MZ4WHC-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
N2FNWR-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
N7HVW3-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
N82D2E-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
N9CF6L-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
NDM4MA-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
NFBFMF-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode-Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
NGLG9E-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
NK6CB7-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
NKLT4E-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
NKUZNH-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
NL3PWD-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
NPJAG9-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
NQP3B2-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
NUCEAC-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
NUVXG6-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
NWZQ9H-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
P2CF6J-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
PGK487-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
PRMRAG-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
PTY4W6-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
PV6JA6-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
PWVN2P-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
PXHUWZ-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
PXTNUG-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
PY2D2C-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
PYLEZV- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
Q28VZ9- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
QF9PD6- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
QGKUZM- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
QHAVPM- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
QHV7MB- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
QKKHLG- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	NI	A, LR	NI	B, LT
QMMLB9- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
QQ7VHG- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
QRWTE8- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
QUKTMJ- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
QW94MN- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
QWAEME- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
R2YXWV- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
R3EXGK- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	B, LT	B, LP	A, LR	NI	B, LT
R46WEV- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
R6HTZM- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
R7WR26- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
R8AREL- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
R8PBVJ-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
R9ZMK8-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
RBAZHV-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
RF4W8M-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
RGECL2-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
RL2UBQ-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	NI
RNDLKL-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
RQ6UZA-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
RRCCY6-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
RUZNXB-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	NI
T3LZZW-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
T62YYD-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
TH6UZ8-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
TL6T4R-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
TPW3YX-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
TRVF76-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
TTNCTE-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
TVWQ36-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	NI	NI	NI	B, LT
TXJ32B-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
TZKQBD-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
TZMXKD-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
U3MLD9-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
U7A4VU-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
U84U29-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
UCDXJ-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
UG2KXU-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
UJWBW3-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, RT	NI	A, LR	NI	B, LT
UQU3X4-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
UT2KWY-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
UTKQCC-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
UVA3BG-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
VC8CC7-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
VCQVLJ-5161	B, RT	A, RI	NI	D, RP	NI	A, LI	C, RM	NI	B, LP	NI	NI	NI
VDNWEB-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
VHEJE4-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
VK83BH-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
VKL2DY-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
VLY2PG-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	B, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
VPDV6D-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
VQNBJR-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
VY4G9Q-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
VY4GBC-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
VZYAD3-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	NI
WAJZDZ-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
WFPQMZ-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
WHDV7C-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
WM6CPA-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT
WPWYDE-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
WRHNRX-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
WTB9BV-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
WU7REH-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
WVE2A3-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
WXQGWA-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
X23EWN-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	NI	NI	NI	B, LT
X3WZQF-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
X7FNU7-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
X7U9KW-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	NI	NI	B, LT

TABLE 1

WebCode- Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
X87D8E- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
X8PT8U- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
X8RRXC- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
X9KCCG- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
XBLHN2- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
XDDG3Y- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
XET4UA- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, RR	NI	B, LT
XF6FGX- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
XFMUZN- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
XHTEQA- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
XKGQPE- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
XQ49RA- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
XXKJ8X- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
XZ9NQA- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
Y2WJQN- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
YATEQ8- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
YCGQPD- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
YENHPX- 5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
YFYFZW- 5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

TABLE 1

WebCode-Test	Items Q1-Q4				Items Q5-Q8				Items Q9-Q12			
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
YGT779-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
YL8CVB-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
YLLVF9-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
YNE4UW-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
YRD6P7-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
YRHX3R-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
YU2GPC-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
ZFENDB-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
ZK6BFN-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
ZNK7UZ-5165	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT
ZQC68Y-5161	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT

Response Summary													Participants: 333
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	
Consensus:	B, RT	A, RI	NI	D, RP	C, LM	A, LI	C, RM	D, LT	B, LP	A, LR	NI	B, LT	
Number:	333	332	333	333	331	333	332	329	328	312	332	327	
Percent:	100.0%	99.7%	100.0%	100.0%	99.4%	100.0%	99.7%	98.8%	98.5%	93.7%	99.7%	98.2%	
Not Identified (NI):	0	1	--	0	2	0	0	1	5	19	--	6	
Other Identifications:	0	0	0	0	0	0	1	3	0	2	0	0	

Additional Comments

TABLE 2

WebCode-Test	Additional Comments
28VHYV-5161	If Q3 and Q11 was actual casework I would not be able to exclude to all the records. For Q3, I would only exclude Item B and D. The fingerprints were not fully rolled in Items A and C. For Q11, I would only exclude Item B. The details required to exclude for Items A, C, and D were not available in the standards.
4B4KXW-5165	Once analyzed the lofoscopic impressions found at the scene, a sufficient amount of information was obtained to allow a lofoscopic confrontation that permits the obtention of reliable results in the identification of people involved.
6M2KBZ-5165	Due to the record prints of Clayton (C) missing the left delta areas on all available knowns, my report states inconclusive.
9CGBQH-5165	The consensus amongst senior fingerprint experts in this agency was that "inconclusive" would also be an acceptable conclusion to reach with regard to Q12 given the limited quality and quantity of available friction ridge detail associated with that latent impression.
9MPH96-5165	The 2021 Latent Print Comparison Test 21-5165 is by far the worst latent comparison test that our laboratory has taken (combined 34 + years of experience). This test appears to have been created with the intent to trick examiners rather than to test them, setting examiners up for failure. Both the standards and the latent prints were sub-par. In standard case work Q11 would require that additional standards be provided to complete the comparison. Latent print Q12 could quite possibly be deemed insufficient for identification quality (due to insufficient uniqueness/detail). Latent prints Q8 and Q9 are very poor quality images (or lifts) that would require reimaging in real casework. The latent print Q9 further appears to have been intentionally manipulated and requires information about the manner/method of collection in order to evaluate appropriately. These comments are to notify CTS and ANAB of our objection to the quality of the test, should the test results create any additional question or issue.
BZ234F-5165	Q3 and Q11 were unidentified.
GCU69A-5165	Q12 would most likely have been reported out as inconclusive to the left thumb of item B as a result of the poor quality of the latent. This is due to the low confidence level as to some of the actual minutia types on the latent.
JJQJ8G-5165	Might not have considered Q12 to be of comparison value in real casework.
MT7AJJ-5165	5-01 (Q1)Identified to the right thumb of Charlotte Wingrave (B). 5-02 (Q2) Identified to the right index finger of Hannah Grose (A). 5-03 (Q3)Excluded to Hannah Grose (A), Charlotte Wingrave (B), and Rebecca Jessel (D). 5-03 (Q3)Inconclusive to Danielle Clayton (C) due to incomplete known friction ridge detail standards. 5-04 (Q4)Identified to the right palm of Rebecca Jessel (D). 5-05 (Q5)Identified to the left middle finger of Danielle Clayton (C). 5-06 (Q6)Identified to the left index finger of Hannah Grose (A). 5-07 (Q7)Identified to the right middle finger of Danielle Clayton (C). 5-08 (Q8)Identified to the left thumb of Rebecca Jessel (D). 5-09 (Q9)Identified to the left palm of Charlotte Wingrave (B). 5-10 (Q10)Identified to the left ring finger of Hannah Grose (A). 5-11 (Q11)Excluded to Hannah Grose (A), Charlotte Wingrave (B), Danielle Clayton (C), and Rebecca Jessel (D). 5-12 (Q12)Identified to the left thumb of Charlotte Wingrave (B).
NKUZNH-5161	Q10: Latent print has insufficient ridge detail for a conclusive determination to be effected / not suitable for identification per our laboratory's protocols
R8PBYJ-5161	Printed copy of Q-12 is too low of resolution to allow for tracking between multiple areas of the print. The contrast of Q-12 is poor is at best. Examiners should not be held accountable for failing to identify Q-12 if they used the printed copy with a standard fingerprint magnifier.

TABLE 2

WebCode- Test	Additional Comments
RL2UBQ- 5161	Q10 possible Item A LR insufficient. Q12 possible Item B LT insufficient.
RUZNXB- 5161	Q12 - I found the print. Worked through it. But in a real life scenario - given the low quality of the print and the resulting low confidence in many of the points near the core - I felt that inconclusive (due to latent print - with points marked in common) was the most appropriate conclusion.
TPW3YX- 5161	POI's Excluded Q3 and Q11.
TVVQ36- 5161	Clarity of prints Q8, Q10 and Q12 are very poor compared to previous years and have a low minutiae count. These prints would not be identifiable under our labs procedures/protocols. For the purpose of this proficiency test, the prints were compared after using our AFIS system to enhance the contrast of the prints.
VZYAD3- 5161	The quality of the latent print in Q12 was not very good and therefore I could only come to an inconclusive conclusion. For Q12, the #6 left thumb on the record of Charlotte Wingrave could not be eliminated as the source of this latent print as the class characteristics were in agreement as were some individual characteristics. However, a lack of sufficient individual characteristics in the latent prevented a more definitive determination. Additionally, the print quality of the ninhydrin developed latent print was not clear. Perhaps the latent print was more clear as the original, however when printed as a digital image some of the quality was lost.

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 21-5161: Latent Print Examination

DATA MUST BE SUBMITTED BY **March 29, 2021, 11:59 p.m.** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A

WebCode: DBAPZ7

The Accreditation Release section can be accessed by using the "Continue to Final Submission" button above. This information can be entered at any time prior to submitting to CTS.

Scenario:

Two interns at a federal agency are suspected of gaining unauthorized access to confidential information and disclosing it to the press. Details of a report maintained on a controlled access computer were reported by national news a day after the interns were found in an agency office that was above their clearance level. The interns state that they inadvertently entered the office but did not interact with the computer or workspace in question. Investigators have supplied you with images of twelve latent prints collected from the scene. They have also provided you with images of known prints from the authorized office workers, as well as the two suspected interns.

Ninhydrin recovered prints have been provided in both full color and greyscale versions.

Please note: an additional survey has been included at the end of the data sheet for your completion.

Items Submitted (Sample Pack LPP1 - Photographs):

Item A: Known finger and palm prints of employee Hannah Grose.

Item B: Known finger and palm prints of employee Charlotte Wingrave.

Item C: Known finger and palm prints of intern Danielle Clayton.

Item D: Known finger and palm prints of intern Rebecca Jessel.

Items Q1-Q12: Twelve latent prints recovered from the scene.

1.) Indicate the results of your comparisons by marking the appropriate boxes.

Please indicate the specific finger or palm identified for each latent print in this test.

If a conclusive identification cannot be made, check "Not Identified," do NOT leave a blank response.

If the identification of a latent fingerprint is made utilizing the palm print exemplar, please indicate ONLY the identified finger in the chart. The exemplar used for identification (e.g. LP, RP) may be documented in the Additional Comments section, but is not required.

Item Letter	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	Right Palm	Left Palm	Not Identified
	RT	RI	RM	RR	RL	LT	LI	LM	LR	LL	RP	LP	
Example 1 A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>								
Example 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

1.) continued.

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	Right Palm	Left Palm	Not Identified
Item Letter	RT	RI	RM	RR	RL	LT	LI	LM	LR	LL	RP	LP	
Q1	<input type="radio"/>												
Q2	<input type="radio"/>												
Q3	<input type="radio"/>												
Q4	<input type="radio"/>												
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	Right Palm	Left Palm	Not Identified
Item Letter	RT	RI	RM	RR	RL	LT	LI	LM	LR	LL	RP	LP	
Q5	<input type="radio"/>												
Q6	<input type="radio"/>												
Q7	<input type="radio"/>												
Q8	<input type="radio"/>												
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	Right Palm	Left Palm	Not Identified
Item Letter	RT	RI	RM	RR	RL	LT	LI	LM	LR	LL	RP	LP	
Q9	<input type="radio"/>												
Q10	<input type="radio"/>												
Q11	<input type="radio"/>												
Q12	<input type="radio"/>												

2.) Additional Comments

Please note: Any additional formatting applied in the free form space below will not transfer to the Summary Report and may cause your information to be illegible. This includes additional spacing and returns that present your response in lists and tabular formats.

Note: Written conclusions are not required for this test. They are not to be substituted for additional comments.

Additional Survey

As part of a collaborative research project with CSAFE (Center for Statistics and Applications in Forensic Evidence), CTS is asking participants to please respond with feedback on the test contents for Test 21-5161/5 Latent Print Examination. This information will not be published with the report, and participation is optional.

1.) Please respond for each questioned latent print in the table below:

- On a scale from 0 to 10 (0 = extremely easy; 10 = extremely difficult), how would you rate the level of challenge of each test item?
- On a scale from 0 to 10 (0 = extremely poor clarity; 10 = extremely high clarity), how would you rate the print clarity of the questioned latent print?

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Level of difficulty	<input type="text"/>											
Latent print clarity	<input type="text"/>											

2.) Do you edit raw images of latent prints (e.g., using enhancement tools such as Photoshop) before assessing in routine casework?

Yes Sometimes Never

a. Did you edit raw images of latent prints in this proficiency test before assessing? Yes No

3.) Do you use automated software that identifies different minutiae within prints in routine casework?

Yes Sometimes Never

a. Did you use automated software to identify different minutiae within prints in this proficiency test?

Yes No

4.) Do you use automated software to identify pattern similarities among prints in routine casework?

Yes Sometimes Never

a. Did you use automated software to identify pattern similarities among prints in this proficiency test?

Yes No

5.) Are proficiency tests such as this subjected to your laboratory's technical and administrative review process?

a. Yes, proficiency test responses undergo typical review procedures before submission

b. No, proficiency test responses are submitted as work product of the test taker alone

c. Other (please specify):

6.) What actions are taken by your laboratory as a result of “inconsistent results” or test errors?

a. Please explain:

b. I do not know the corrective actions my laboratory takes

7.) Is your employer accredited according to ISO/IEC 17025 or ISO/IEC 17020?

Yes No

RELEASE OF DATA TO ACCREDITATION BODIES

The Accreditation Release is accessed by pressing the "Continue to Final Submission" button online and can be completed at any time prior to submission to CTS.

CTS submits external proficiency test data directly to ASCLD/LAB, ANAB, and/or A2LA. Please select one of the following statements to ensure your data is handled appropriately.

- This participant's data is intended for submission to ASCLD/LAB, ANAB, and/or A2LA. (Accreditation Release section below must be completed.)
- This participant's data is **not** intended for submission to ASCLD/LAB, ANAB, and/or A2LA.

Have the laboratory's designated individual complete the following steps
only if your laboratory is accredited in this testing/calibration discipline
by one or more of the following Accreditation Bodies.

Step 1: Provide the applicable Accreditation Certificate Number(s) for your laboratory

ANAB Certificate No.
(Include ASCLD/LAB Certificate here)

A2LA Certificate No.

Step 2: Complete the Laboratory Identifying Information in its entirety.

Authorized Contact Person and Title

Laboratory Name

Location (City/State)