

P.O. Box 650820 Sterling, VA 20165-0820 e-mail: forensics@cts-interlab.com Telephone: +1-571-434-1925 Web site: www.cts-forensics.com

Latent Print Examination Test No. 19-5171/2/5 Summary Report

Each sample pack of this test contained one of the following: digitally produced photographs (19-5171), a DVD containing digital images (19-5172), or directly downloadable digital images (19-5175) of eleven 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 369 participants: 204 for 19-5171, 87 for 19-5172, and 78 for 19-5175 and are compiled into the following tables:

	<u>Page</u>
<u>Manufacturer's Information</u>	<u>2</u>
Summary Comments	<u>3</u>
Table 1: Latent Print Identifications	<u>4</u>
Table 2: Additional Comments	<u>23</u>
Appendix: Data Sheet	

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.

Manufacturer's Information

Each sample pack contained either photographs or digital images consisting of known finger and palm imprints of four individuals and eleven latent "crime scene prints". Nine of the eleven 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. Each DVD was checked to ensure all images were accessible. Digital download media were zipped and uploaded to the CTS portal.

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

Summary Comments

This test was designed to allow participants to assess their proficiency in the identification of latent finger and palm prints. Nine latent prints (Q1, Q3-Q8, Q10-Q11) were made by one of four individuals for whom inked prints were provided (Items A-D). Two latent prints (Q2, Q9) were from an individual for whom inked prints were not provided (Refer to the Manufacturer's Information for preparation details).

Of the 369 responding participants, 315 (85%) reported the expected nine identifications and two non-identifications. There were fifty-four participants who reported inconsistent 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 four participants who either attributed a latent to a different finger or palm than that established by the consensus, or who identified an individual but did not identify a finger (Other Identifications). There were fifty participants who did not identify one or more latent prints for which known exemplars were provided (Not Identified). Within these 50 participants, one also attributed a latent to a different finger or palm than that established by the consensus (Other Identifications and Not Identified). Outlier responses were reported for seven of the eleven latent prints in this test.

The most common inconsistent result was the non-identification of Item Q5. Some participants noted in their Additional Comments that this print was not suitable for identification per their laboratory's protocols, which resulted in a "Not Identified" conclusion in some cases. The increased difficulty of this print may be attributed to the fact that it was developed with ninhydrin, making it more challenging for examiners. This print was successfully identified by all predistribution examiners, and consensus was still met by the full testing population, resulting in the inclusion of marked outliers in the final report.

Latent Print Identifications

TABLE 1

WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q5	Items Q6	Q5-Q8 Q7	Q8	lte Q9	ms Q9-0 Q10	Q11 Q11
243MNU- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
24Y2XF- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
2CVW2J- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
2FD3N8- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
2FW4DV- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
2GAHYJ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
2HGX8B- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
2HJMET- 5172	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
2KQXL3- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
2T24FK- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
32DM2J- 5172	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
33MN46- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
34B7WP- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
36A863- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
37L2RU- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	NI
3G7AJH- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
3XPBZT- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
3YJWV6- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
43E83N- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					17 (0	'					
WebCode-			Q1-Q4		A.		Q5-Q8			ms Q9-0	
Test 472LCR- 5171	Q1 B, LT	Q2 NI	Q3 D, RR	Q4 C, RP	Q5 NI	Q6 A, LP	Q7 C, RM	Q8 A, RT	Q9 NI	Q10 C, RR	Q11 B, RM
4EAD4A- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4G6UPG- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4JT7UZ- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4L4KH9- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4LBEVN- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4LD2C3- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4N2VT4- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4N4KYL- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4PDGGJ- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4PTMWA- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4TMQGZ- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4VFMVM- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4WG7HB- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4WU47R- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4XT6E6- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
4ZGGFV- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
68TT72- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
6CZQZU- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
6MMKPH- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					17 (0	'					
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q5	Items Q6	Q5-Q8 Q7	Q8	lte Q9	ems Q9-0 Q10	Q11 Q11
6PDMLK- 5171	B, LT	NI	D, RR	C, RP	C, LT		C, RM		NI	C, RR	B, RM
6Q23VT- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
6VUJTE- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
6Y2L6N- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
6ZQRTF- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
74XXA7- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
77BB7F- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
77EXNU- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
786W3R- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
78NV9B- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
7FGEDY- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
7FJ2TR- 5171	NI	NI	D, RR	C, RP	NI	A, LP	NI	A, RT	NI	NI	NI
7L7QLM- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
7RW7ZM- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
7WZ2QA- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
82RKEQ- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
83768Z- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
882R6V- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
88FF8G- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
8L4NYG- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					17 (D	'					
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q5	Items Q6	Q5-Q8 Q7	Q8	lte Q9	ms Q9-0 Q10	Q11
8MBUDF- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
8N99XM- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
8WMXQG- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
8WYMJ8- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
8ZHPWT- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
8ZLCCL- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
938AEV- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
96PGJB- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
977MXE- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
984ZJL- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
98V7GD- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
9C6GHU- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
9FAX8P- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
9FP83X- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
9GMKKJ- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
9HF98L- 5172	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
9MUXM2- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
9QAJCP- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
9RN46Y- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
A27YUC- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					ואט	LL 1					
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q5	Items Q6	Q5-Q8 Q7	Q8	Ite Q9	ms Q9-0 Q10	Q11 Q11
A8X76K- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	NI	NI
AAY2ZG- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
AFNRBH- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
AHT8UH- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
AQN6MC- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
AWNX77- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
AXKBRD- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
AYZBB3- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
B66HHJ- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
B7B6RG- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
B8A7ZU- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
B9LUCR- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
B9YL2P- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
BDE3LE- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
BH9ZYK- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
BHMLB8- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
BU62NK- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
BWAGZK- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
C7WUPF- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
C9GY7Q- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					17 (0						
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q5	Items Q6	Q5-Q8 Q7	Q8	lte Q9	ms Q9-0 Q10	Q11 Q11
CABPAK- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CADFG3- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CF2ZKH- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CF4M4G- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CH26V6- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CJXRG9- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CJZEXM- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CLNQYD- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CNQPYK- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CNRQQX- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CQX4GC- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CRUEMM- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CWAVYB- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
CXFLQD- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
D3H7Y3- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
DBZ9UJ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
DD7LJX- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
DFCCJL- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
DH3DPA- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
DK9VN6- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					., (5						
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q5	Items Q6	Q5-Q8 Q7	Q8	lte Q9	ms Q9-0 Q10	Q11
DR7LXU- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
DT2ZTD- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
DW6UQH- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
DY9LKG- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
EBDCM3- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
ECBMFJ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
EF944K- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
EGP8KX- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
EJ8EZK- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
EJ8HF4- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
EVGATB- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
EYJWX2- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
EYYG9X- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
EZG7QH- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
F33B22- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
F9CE8F- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FE8HQ7- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FF29UZ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FF7Q3A- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FHWPG8- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					17 (0	'					
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q5	Items	Q5-Q8 Q7	Q8	lte Q9	ms Q9-0 Q10	Q11 Q11
FKZTTH- 5175	B, LT	NI	D, RR	C, RP	C, LT		C, RM		NI	C, RR	B, RM
FMRJE9- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FNVHZN- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FPVFQC- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FUMNXY- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FURY4G- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FVFF44- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FVZ76B- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FX4WDC- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FYMQCD- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
FZXHAN- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
G3A44E- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
G9387J- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
GDXXLF- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
GF3JDM- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
GFQM9H- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
GGV8UJ- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
GJH43A- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
GNEJXC- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
GP6YZ8- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

WebCode-	Items Q1-Q4				Items Q5-Q8				Items Q9-Q11			
Test	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	
GX2HGF- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
GY2KEM- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
H39QVC- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
H3XMRY- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
H6JGDT- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
H7V2FP- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
H8HWHB- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
HC3KKV- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
HF4H6A- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
HFKX6J- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
HLPTZP- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
HMJGJL- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
HRBM6L- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
HUXHEB- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
HUY2HD- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
HY6TM6- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
J9JY7R- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
J9Z2Z9- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
JBYKVF- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
JDNVQR- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	

TABLE 1

WebCode-	Items Q1-Q4				Items Q5-Q8				Items Q9-Q11			
Test	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	
JRNMGQ- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
JWZJVZ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
JXTJ3B- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
K6DT6R- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
K9N294- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
K9XLFU- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KA63HG- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KC9V73- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KDXB9K- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KF7GR2- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KHEH4Z- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KHY8BH- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KJDGKM- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KNMTDR- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KR64AX- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KRLCAY- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KT2GU6- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KWZUFA- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KY6FG2- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	
KZFKK6- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM	

TABLE 1

					ואט	LL I					
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q5	Items Q6	Q5-Q8 Q7	Q8	Ite Q9	ms Q9-G Q10	Q11 Q11
L28V84- 5172	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
L7LDDE- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
LDXEQ3- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
LGXQL3- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
LJM6YJ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
LJYXHZ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
LKGV6X- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
LMBGZA- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	NI
LNYXAH- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
LUHGTJ- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
LW9H2T- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
LZFU88- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
M3CP99- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
M3FCN2- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	NI
M6KZ6C- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
M8NT9W- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
M9MQPJ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
MBDRV8- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
MTLC63- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
MTWTL4- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					., .5						
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q 4	Q5	Items Q6	Q5-Q8 Q7	Q8	Ite Q9	ems Q9-0 Q10	Q11 Q11
MUKALQ- 5172	B, LT	NI	D, RR	C, RP	C, LT		C, RM		NI	C, RR	B, RM
MWRRKL- 5172	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
MYX6JL- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
N3XG4E- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
N6FYR3- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
N7EZZF- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
N92C27- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
NAE926- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
NB6A8T- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
NB8XN7- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
NDQ6TM- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
NHHDU9- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	NI
NJD4UV- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
NJYNUZ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
nktapd- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
NVRU4Y- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
P42R32- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
PARYXD- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
PB4RL4- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	NI
PBPBN4- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

(15)

TABLE 1

					., ,,	'					
WebCode-	01		Q1-Q4	04	OF		Q5-Q8	00		ms Q9-0	
Test PE49VQ- 5171	Q1 B, LT	Q2 NI	Q3 D, RR	Q4 C, RP	Q5 C, LT	Q6 A, LP	Q7 C, RM	Q8 A, RT	Q9 NI	Q10 C, RR	Q11 B, RM
PGB936- 5172	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
PGLFZ7- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
PH3A32- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
PJYZ4M- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
PKAR2X- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
PLX9B6- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
PR4WUY- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
PT3X3B- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Q2CRNR- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Q2URMZ- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Q6T7Z6- 5172	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
QA2QQW- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
QDM7P6- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
QEXYPY- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
QFTU48- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
QHY2MZ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
QV77LC- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
QVH774- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
QVRL8W- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					17 (2	'					
WebCode-	01		Q1-Q4		0.5	Items		00		ms Q9-0	
Test QXQ36E-	Q1 B, LT	Q2 NI	Q3 D, RR	Q4 C, RP	Q5 C, LT	Q6	Q7 C, RM	Q8	Q9 NI	Q10 C, RR	Q11
5171	D, LI	INI	D, KK	C, Kr	C, LI	A, Lr	C, KIVI	A, KI	INI	C, KK	B, RM
QZEE76- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
R4V7RR- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
R8W3J8- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
R8ZPYZ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
RDAFMB- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
RJ3DHT- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
RJM3UM- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
RJM6DY- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
RLC6YB- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
RLV37U- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
RNY282- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
RTRBAM- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
RVFQJU- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
RZN2JB- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
T4CQWZ- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
TBU3WA- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
TGDD4J- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
TL9Z2D- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
TLAYUZ- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					17 (5						
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q 5	Items Q6	Q5-Q8 Q7	Q8	lte Q9	ms Q9-0 Q10	Q11 Q11
TVTMFM- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
TX3GQE- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
U2XNEV- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
U3N3NQ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
U6WYAV- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
U7D2B3- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
U8JTU3- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
U8NXYB- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
UFJ4JT- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
UJWPGT- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
UKU322- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
UP68QT- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
UQHU98- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
URBKEL- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
UT2N2N- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
UTAV84- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
UUG648- 5171	B, LT	NI	D, RR	C, RP	C, NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
UUWEZF- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
UWNDDE- 5172	B, LT	NI	D, RR	C, LP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
V6VCKU- 5175	B, LT	NI	D, RR	C, LP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					17 (5	'					
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q5	Items Q6	Q5-Q8 Q7	Q8	lte Q9	ms Q9-0 Q10	Q11 Q11
VC9FGV- 5171	B, LT	NI	D, RR	C, RP	C, LT		C, RM		NI	C, RR	B, RM
VL6E33- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
VM9BBK- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
VP2YXL- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
VTYER3- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
VUVZ92- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
VV3F6L- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WPPCU- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WRDT9- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
W2WB8R- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
W37D33- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
W76RM8- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
W79E3Z- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
W9CAL3- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WDX9PJ- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WE8FN7- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WF8D6T- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WHFCP3- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WHZ6KJ- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WKHCPY- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					17 (0	'					
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q5	Items Q6	Q5-Q8 Q7	Q8	lte Q9	ms Q9-0 Q10	Q11 Q11
WKXKPM- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WQU6ZX- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WRLAJW- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WTDBHT- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
WV2QR2- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
X22LU9- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
X6MAP7- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
X8HKY2- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
X8WATT- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XBWLNT- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XDGFJ8- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XDK3XZ- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XDYB3U- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XET8DA- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XFCTJR- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XJX8DE- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XLUJKD- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XMN849- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XQM9BK- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XTCUTM- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

					., (5						
WebCode- Test	Q1	Items Q2	Q1-Q4 Q3	Q4	Q5	Items Q6	Q5-Q8 Q7	Q8	lte Q9	ms Q9-0 Q10	Q11 Q11
XUCRAA- 5172	B, LT	NI	D, RR	C, RP	C, LT		C, RM		NI	C, RR	B, RM
XX4ZAW- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
XYGNTA- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Y48B7G- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Y4MUQE- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Y679M6- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
YBEN8Y- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
YEAFDB- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
YHRPAG- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
YQ7L8A- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
YQFWDE- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
YUQCL4- 5175	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
YVEVJY- 5171	B, LT	NI	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
YWC947- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, RR	C, RM	A, RT	NI	C, RR	B, RM
Z223MP- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, NI	C, RM	A, RT	NI	C, RR	B, RM
Z3YDG8- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Z4JHJM- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Z6RPKH- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Z7VXDN- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Z9HUJU- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM

TABLE 1

WebCode- Test	01	Items (Q4	05	Items (Items Q9-Q11 Q9 Q10 Q11			
	Q1	Q2	Q3		Q5 I	Q6	Q7	Q8	l		Q11
ZAQ7WC- 5175	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
ZB77KK- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
ZH4XKN- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
ZKQJKQ- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
ZKU726- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
ZNNWDH- 5171	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
ZPKKKK- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
ZRE7FW- 5171	B, LT	ΝΙ	D, RR	C, RP	NI	A, LP	C, RM	A, RT	NI	C, RR	B, RM
ZV6RUC- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
ZXEPDL- 5172	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Response	e Sun	nmar	у						Po	ırticipan	ts: 369
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11
Consensus:	B, LT	NI	D, RR	C, RP	C, LT	A, LP	C, RM	A, RT	NI	C, RR	B, RM
Number:	368	369	369	367	320	367	368	369	369	367	362
Percent:	99.7%	100.0%	100.0%	99.5%	86.7%	99.5%	99.7%	100.0%	100.0%	99.5%	98.1%
Not Identified (NI):	1		0	0	48	0	1	0		2	7
Other Identifications:	0	0	0	2	1	2	0	0	0	0	0

Additional Comments

TABLE 2

WebCode-	
Test	Additional Comments
2HJMET- 5172	Marked Q5 as not identified due to insufficient detail, though analyst believes that Item C (#6 L.T.) shares similarities.
32DM2J- 5172	Q5: Treating this latent print as I would in casework, the Ninhydrin latent print was determined to be not of value. However, similarities are seen to the #6 (left thumb) finger of Fred Buckle (item C).
4XT6E6- 5175	Items A, B, C, and D have been excluded as the source of the FRD on Items Q2 and Q9.
8MBUDF- 5171	Q2 and 9 Supplied POI's excluded.
9HF98L- 5172	Marked Q5 as not identified due to insufficient detail, though analyst believes that Item C (#6 L.T.) shares similarities.
B7B6RG- 5175	Feel that Q5 is debatably of no value for comparison.
EYYG9X- 5175	On Q11 there are 2 impressions slightly overlaid of Right Middle finger of item B
FX4WDC- 5175	Another fine CTS test. Recommend improving latent print image quality (clarity) in future tests to afford an equal opportunity for successful completion by those examiners not routinely afforded the use of digital image enhancement during proficiency testing. For example, in this test latent print Q5's connect-the-dots appearance combined with low contrast means its value for comparison is improved with image processing such as FBI CJIS' Universal Latent Workstation utilizing simultaneous binarization and local histogram equalization. Image quality of some of the other latent print images in this test was less than expected for proficiency testing, but Q5 was surprisingly poor quality.
H7V2FP- 5172	1. Resolution is still entirely too low (while it meets NIST minimum standards) considering most agencies are working with casework images at well over 3000ppi. 2. Not providing information on specific lift locations is not in keeping, generally, with actual casework as this information is used to determine appropriate comparisons, etc. 3. Q5 was the Ninhydrin image but the file was in CMYK format, which suggests that this was not the original image from the capture device (capture devices utilize RGB for capture). This hindered additional image processing and caused concern about what other alterations had been made to the image. 4. Generally speaking in testing Qs are test items and Ks are unaltered. In this test some of the standards were poorly recorded and also appeared to show a blurred type effect.
KC9V73- 5171	#5 I feel was insufficient and of no value/not suitable for comparison. I would never have used this latent in a real world scenario.
KNMTDR- 5172	The results of these comparisons reflect the final conclusions of this proficiency test as is the practice of [Laboratory]. The original analyst reached a conclusion of "not identified" for item Q5 since it was determined to be "for exclusion only" based on [Laboratory]'s SOP. However, after consultation with the verifying analyst, item Q5 was determined to be "of value for comparison" and ultimately "identified" to Item C.
MWRRKL- 5172	I did note corresponding friction ridge detail between Q5 and the left thumb of Item 5. However, I felt that it was insufficient ridge detail for a conclusive determination to be effected. In order to be consistent with casework I could not say that it was an identification. If I had compared these prints in casework I would have effected and inconclusive determination. The wording would read: "Comparison of latent print Q5 with the left thumb print of Item C resulted in an inconclusive determination. Although corresponding friction ridge detail was noted the poor quality and clarity of print Q5 was such that a conclusive determination could not be effected."

TABLE 2

WebCode- Test	Additional Comments
PGB936- 5172	Marked Q5 as not identified due to insufficient detail, though analyst believes that Item C (#6 L.T.) shares similarities.
TLAYUZ- 5175	Both latent prints in Q11 are Item B #3 R. Middle.
U8JTU3- 5171	La latente codificada como Q5 no cumple con las características necesarias para verificar identidad, de acuerdo con los procedimientos estandarizados por el Laboratorio. [Translation was not received by CTS prior to the publication of this report.]
UUG648- 5171	Latent Q5 is inconclusive to C6, there is agreement in detail but also sufficient disagreement, distortion and underdevelopment as to not reach a conclusion. Q5 can be excluded to all exemplars except for C6. It can not be identified or excluded to C6. In actual casework, we would re-image the original latent and or reprocess with ninhydrin to further enhance any potential development. Since we do not possess the original evidence our final conclusion is that it is inconclusive. To represent actual casework, these CTS test should offer an inconclusive option for final conclusions.
W3F6L- 5171	Q4 = RIGHT TRIRADIATE. Q6 = LEFT TRIRADIATE
VVPPCU- 5175	Q7: Comparison print (fingers taken simultaneousely) used for identification

Collaborative Testing Services ~ Forensic Testing Program

Test No. 19-5171: Latent Print Examination

DATA MUST BE SUBMITTED BY Oct. 28, 2019, 11:59 p.m. TO BE INCLUDED IN THE REPORT

Participant Code: U1234A WebCode: WFYR77

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:

Police are investigating the theft of money and medical supplies from a doctor's office. The victim, Dr. Patrick Turner, alleges that cash from the lockbox went missing when he was out on call to the local hospital. His lead nurse who maintains the secured areas, Phyllis Crane, confirms that the medical supply log is also inaccurate for the day in question, when she was ill at home. Two additional office workers have been fingerprinted. Investigators have supplied you with images of eleven latent prints collected from the scene. They have also provided you with images of known prints from the doctor and lead nurse, as well as the two suspects.

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

Items Submitted (Sample Pack LPP2 - Photographs):

Item A: Known finger and palm prints of Dr. Patrick Turner.

Item B: Known finger and palm prints of RN Phyllis Crane.

Item C: Known finger and palm prints of suspect Fred Buckle.

Item D: Known finger and palm prints of suspect Beatrix Franklin.

Items Q1-Q11: Eleven 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.

		#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	Right Palm	Left Palm	
	ltem Letter	RT	RI	RM	RR	RL	LT	LI	LM	LR	LL	RP	LP	Not Identified
Example 1	Α													
Example 2														•

Participant Code: U1234A WebCode: WFYR77

1.) continued.

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	Right Palm	Left Palm	
Item Letter	RT	RI	RM	RR	RL	LT	LI	LM	LR	LL	RP	LP	Not Identified
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	Right Palm	Left Palm	
Item Letter	RT	RI	RM	RR	RL	LT	LI	LM	LR	LL	RP	LP	Not Identified
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	Right	Left	
											raum	raum	
Item Letter	RT	RI	RM	RR	RL	LT	LI	LM	LR	LL	RP	LP	Not Identified
	RT	RI	RM	RR	RL	LT	LI	LM	LR	LL			
											RP	LP	Identified
	Letter	Item Letter RT #1 Item RT Etter RT RT Letter	Item Letter RT RI #1 #2 Item RT RI #1 RI Item RT RI	Item Letter RT RI RM RM RM RM RM RM RM RM RM RM	Item	Item	Item RT RI RM RR RL LT	Item RT RI RM RR RL LT LI	Item Letter RT RI RM RR RL LT LI LM Image: Letter or control of the control of th	Item Letter RT RI RM RR RL LT LI LM LR Image: Letter Letter Letter #1 #2 #3 #4 #5 #6 #7 #8 #9 Item Letter RT RI RM RR RL LT LI LM LR Image: Letter Letter Image: Letter Letter Letter Image: Letter Letter Letter Letter Letter Image: Letter Lette	Item Letter RT RI RM RR RL LT LI LM LR LL Image: Letter Letter Letter #1 #2 #3 #4 #5 #6 #7 #8 #9 #10 Item Letter RT RI RM RR RL LT LI LM LR LL Image: Letter Letter Image: Letter Letter Letter Image: Letter Letter Letter Letter Letter Image: Letter	Item RT RI RM RR RL LT LI LM LR LL RP	The control of the

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.

Participant Code: U1234A WebCode: WFYR77

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.)

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 applica	ble Accreditation Certifica	ate Number(s) for your laboratory	
(I	ANAB Certificate No. nclude ASCLD/LAB Certificate here)		
	A2LA Certificate No.		
Step 2: Complete the Labo	ratory Identifying Informat	tion in its entirety	
Authorized Conta	ct Person and Title		
Laboratory Name			
Location (City/St	ate)		

This participant's data is **not** intended for submission to ASCLD/LAB, ANAB, and/or A2LA.