



## **Tenprint Examination**

### **Test No. 24-5141 Summary Report**

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Each digital sample set contained twelve single-print card pairs, eight questioned tenprint cards, and eight tenprint card standards. Participants were asked to compare the two prints within each single-print pair to determine whether or not they originated from the same source. They were also asked to compare each questioned tenprint card to the standard cards to determine if any shared a common source. Data were returned from 56 participants 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 digital sample set consisted of single-print and tenprint cards for comparison. Items Q1-Q12 contained a series of single-print pairs, and Items Q13-Q20 contained tenprint cards for comparison to a pool of standards (Items A-H). In the first section, participants were asked to compare the single-print pairs to determine if both prints originated from a single source. In the second section, participants were asked to compare the questioned tenprint cards to each standard to determine if any shared a common source.

## SAMPLE PREPARATION

Using several anonymized databases containing a limited number of fingerprints, both visual comparison and AFIX comparison software were used to select the single-print and tenprint cards provided in this test.

**SINGLE-PRINT PAIRS:** To create single-print pairs from different sources, prints with similar first and second-level details were chosen, paired together, and designated as either a questioned or standard item in the pair. For single-print pairs from the same source, uniquely collected prints from the same finger of an individual were paired together.

**TENPRINT CARDS:** To create tenprint cards without a standard source, cards with similar first and second-level details were chosen and designated as either a questioned item or a comparison standard. For tenprint cards originating from the same source, each card was designated as either a questioned or comparison standard item.

All prints were digitally resized to scale. The test items were then uploaded to the CTS Portal for download by test participants.

**VERIFICATION:** All predistribution results were consistent with the manufacturer's preparation information.

Single-Print Pairs	Same Source?	Tenprint Card	Standard Source?
Q1	Yes	Q13	None
Q2	Yes	Q14	E
Q3	No	Q15	A
Q4	No	Q16	None
Q5	No	Q17	None
Q6	No	Q18	None
Q7	Yes	Q19	None
Q8	No	Q20	G
Q9	No		
Q10	No		
Q11	No		
Q12	No		

## **Summary Comments**

This test was designed to allow participants to assess their proficiency in tenprint comparison and analysis. Within the single-print pair section, questioned prints Q1, Q2 and Q7 shared a common source with its standard print pair. For the tenprint card comparison section, the following common sources were shared between a questioned tenprint card and a standard tenprint card: Q14 with standard E, Q15 with standard A, and Q20 with standard G. Refer to the Manufacturer's Information for preparation details.

All 56 responding participants reported results consistent with the manufacturer's preparation information for the twelve single-print pairs and the eight questioned tenprint cards.

# Single-Print Comparisons

Does each pair of the following collected single-print cards originate from the same source?

TABLE 1 - Item Q1

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	Yes	GJFB6P	Yes
2RWRX8	Yes	GJZK4C	Yes
3YDAYQ	Yes	HDJBZR	Yes
4ADRZZ	Yes	HRNUQD	Yes
4NCLR9	Yes	HY6XNL	Yes
6KQBX2	Yes	J9RNXC	Yes
7WF37P	Yes	K4CGAD	Yes
8R3C8V	Yes	K7YPAL	Yes
8RZUHP	Yes	K9PNNJ	Yes
8V2M4V	Yes	KU2ENC	Yes
9977EV	Yes	LE89VA	Yes
9CLE3U	Yes	LFJFAH	Yes
9QLFFV	Yes	MD746L	Yes
A3UMP2	Yes	NFT6ME	Yes
ALFPJ	Yes	NLZ2F9	Yes
CV6GBQ	Yes	NPZCC9	Yes
DV2GNV	Yes	PJLLDE	Yes
E4DV7R	Yes	PYZUDH	Yes
EQKDBY	Yes	Q89DY7	Yes
EYH29Q	Yes	QX27AC	Yes
F87BVQ	Yes	R6JVAD	Yes

TABLE 1 - Item Q1

WebCode	Same Source?	WebCode	Same Source?
R9EP8E	Yes		
RDUXVD	Yes		
U6LL8D	Yes		
U8WF8C	Yes		
VDHVBA	Yes		
VBJLD	Yes		
W63927	Yes		
WF6YRZ	Yes		
XLQEVX	Yes		
XUFUB9	Yes		
YVBGNC	Yes		
YVQVX8	Yes		
Z3NDWW	Yes		
ZB2W83	Yes		

<b>Response Summary - Q1</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	56	
No	0	
Unable To Determine	0	

TABLE 1 - Item Q2

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	Yes	GJZK4C	Yes
2RWRX8	Yes	HDJBZR	Yes
3YDAYQ	Yes	HRNUQD	Yes
4ADRZZ	Yes	HY6XNL	Yes
4NCLR9	Yes	J9RNXC	Yes
6KQBX2	Yes	K4CGAD	Yes
7WF37P	Yes	K7YPAL	Yes
8R3C8V	Yes	K9PNNJ	Yes
8RZUHP	Yes	KU2ENC	Yes
8V2M4V	Yes	LE89VA	Yes
9977EV	Yes	LFJFAH	Yes
9CLE3U	Yes	MD746L	Yes
9QLFFV	Yes	NFT6ME	Yes
A3UMP2	Yes	NLZ2F9	Yes
ALFPJ	Yes	NPZCC9	Yes
CV6GBQ	Yes	PJLLDE	Yes
DV2GNV	Yes	PYZUDH	Yes
E4DV7R	Yes	Q89DY7	Yes
EQKDBY	Yes	QX27AC	Yes
EYH29Q	Yes	R6JVAD	Yes
F87BVQ	Yes	R9EP8E	Yes
GJFB6P	Yes	RDUXVD	Yes

TABLE 1 - Item Q2

WebCode	Same Source?	WebCode	Same Source?
U6LL8D	Yes		
U8WF8C	Yes		
VDHVBA	Yes		
VWBJLD	Yes		
W63927	Yes		
WF6YRZ	Yes		
XLQEVX	Yes		
XUFUB9	Yes		
YVBGNC	Yes		
YVQVX8	Yes		
Z3NDWW	Yes		
ZB2W83	Yes		

<b>Response Summary - Q2</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	56	
No	0	
Unable To Determine	0	

TABLE 1 - Item Q3

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	No	GJZK4C	No
2RWRX8	No	HDJBZR	No
3YDAYQ	No	HRNUQD	No
4ADRZZ	No	HY6XNL	No
4NCLR9	No	J9RNXC	No
6KQBX2	No	K4CGAD	No
7WF37P	No	K7YPAL	No
8R3C8V	No	K9PNNJ	No
8RZUHP	No	KU2ENC	No
8V2M4V	No	LE89VA	No
9977EV	No	LFJFAH	No
9CLE3U	No	MD746L	No
9QLFFV	No	NFT6ME	No
A3UMP2	No	NLZ2F9	No
ALFPJ	No	NPZCC9	No
CV6GBQ	No	PJLLDE	No
DV2GNV	No	PYZUDH	No
E4DV7R	No	Q89DY7	No
EQKDBY	No	QX27AC	No
EYH29Q	No	R6JVAD	No
F87BVQ	No	R9EP8E	No
GJFB6P	No	RDUXVD	No



TABLE 1 - Item Q3

WebCode	Same Source?	WebCode	Same Source?
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VWBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q3</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	0	
No	56	
Unable To Determine	0	

TABLE 1 - Item Q4

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	No	GJZK4C	No
2RWRX8	No	HDJBZR	No
3YDAYQ	No	HRNUQD	No
4ADRZZ	No	HY6XNL	No
4NCLR9	No	J9RNXC	No
6KQBX2	No	K4CGAD	No
7WF37P	No	K7YPAL	No
8R3C8V	No	K9PNNJ	No
8RZUHP	No	KU2ENC	No
8V2M4V	No	LE89VA	No
9977EV	No	LFJFAH	No
9CLE3U	No	MD746L	No
9QLFFV	No	NFT6ME	No
A3UMP2	No	NLZ2F9	No
ALFPJ	No	NPZCC9	No
CV6GBQ	No	PJLLDE	No
DV2GNV	No	PYZUDH	No
E4DV7R	No	Q89DY7	No
EQKDBY	No	QX27AC	No
EYH29Q	No	R6JVAD	No
F87BVQ	No	R9EP8E	No
GJFB6P	No	RDUXVD	No

TABLE 1 - Item Q4

WebCode	Same Source?	WebCode	Same Source?
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VWBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q4</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	0	
No	56	
Unable To Determine	0	

TABLE 1 - Item Q5

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	No	GJZK4C	No
2RWRX8	No	HDJBZR	No
3YDAYQ	No	HRNUQD	No
4ADRZZ	No	HY6XNL	No
4NCLR9	No	J9RNXC	No
6KQBX2	No	K4CGAD	No
7WF37P	No	K7YPAL	No
8R3C8V	No	K9PNNJ	No
8RZUHP	No	KU2ENC	No
8V2M4V	No	LE89VA	No
9977EV	No	LFJFAH	No
9CLE3U	No	MD746L	No
9QLFFV	No	NFT6ME	No
A3UMP2	No	NLZ2F9	No
ALFPJ	No	NPZCC9	No
CV6GBQ	No	PJLLDE	No
DV2GNV	No	PYZUDH	No
E4DV7R	No	Q89DY7	No
EQKDBY	No	QX27AC	No
EYH29Q	No	R6JVAD	No
F87BVQ	No	R9EP8E	No
GJFB6P	No	RDUXVD	No

TABLE 1 - Item Q5

WebCode	Same Source?	WebCode	Same Source?
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VWBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q5</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	0	
No	56	
Unable To Determine	0	

TABLE 1 - Item Q6

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	No	GJZK4C	No
2RWRX8	No	HDJBZR	No
3YDAYQ	No	HRNUQD	No
4ADRZZ	No	HY6XNL	No
4NCLR9	No	J9RNXC	No
6KQBX2	No	K4CGAD	No
7WF37P	No	K7YPAL	No
8R3C8V	No	K9PNNJ	No
8RZUHP	No	KU2ENC	No
8V2M4V	No	LE89VA	No
9977EV	No	LFJFAH	No
9CLE3U	No	MD746L	No
9QLFFV	No	NFT6ME	No
A3UMP2	No	NLZ2F9	No
ALFPJ	No	NPZCC9	No
CV6GBQ	No	PJLLDE	No
DV2GNV	No	PYZUDH	No
E4DV7R	No	Q89DY7	No
EQKDBY	No	QX27AC	No
EYH29Q	No	R6JVAD	No
F87BVQ	No	R9EP8E	No
GJFB6P	No	RDUXVD	No

TABLE 1 - Item Q6

WebCode	Same Source?	WebCode	Same Source?
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VWBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q6</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	0	
No	56	
Unable To Determine	0	

TABLE 1 - Item Q7

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	Yes	GJZK4C	Yes
2RWRX8	Yes	HDJBZR	Yes
3YDAYQ	Yes	HRNUQD	Yes
4ADRZZ	Yes	HY6XNL	Yes
4NCLR9	Yes	J9RNXC	Yes
6KQBX2	Yes	K4CGAD	Yes
7WF37P	Yes	K7YPAL	Yes
8R3C8V	Yes	K9PNNJ	Yes
8RZUHP	Yes	KU2ENC	Yes
8V2M4V	Yes	LE89VA	Yes
9977EV	Yes	LFJFAH	Yes
9CLE3U	Yes	MD746L	Yes
9QLFFV	Yes	NFT6ME	Yes
A3UMP2	Yes	NLZ2F9	Yes
ALFPJ	Yes	NPZCC9	Yes
CV6GBQ	Yes	PJLLDE	Yes
DV2GNV	Yes	PYZUDH	Yes
E4DV7R	Yes	Q89DY7	Yes
EQKDBY	Yes	QX27AC	Yes
EYH29Q	Yes	R6JVAD	Yes
F87BVQ	Yes	R9EP8E	Yes
GJFB6P	Yes	RDUXVD	Yes



TABLE 1 - Item Q7

WebCode	Same Source?	WebCode	Same Source?
U6LL8D	Yes		
U8WF8C	Yes		
VDHVBA	Yes		
VWBJLD	Yes		
W63927	Yes		
WF6YRZ	Yes		
XLQEVX	Yes		
XUFUB9	Yes		
YVBGNC	Yes		
YVQVX8	Yes		
Z3NDWW	Yes		
ZB2W83	Yes		

<b>Response Summary - Q7</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	56	
No	0	
Unable To Determine	0	

TABLE 1 - Item Q8

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	No	GJZK4C	No
2RWRX8	No	HDJBZR	No
3YDAYQ	No	HRNUQD	No
4ADRZZ	No	HY6XNL	No
4NCLR9	No	J9RNXC	No
6KQBX2	No	K4CGAD	No
7WF37P	No	K7YPAL	No
8R3C8V	No	K9PNNJ	No
8RZUHP	No	KU2ENC	No
8V2M4V	No	LE89VA	No
9977EV	No	LFJFAH	No
9CLE3U	No	MD746L	No
9QLFFV	No	NFT6ME	No
A3UMP2	No	NLZ2F9	No
ALFPJ	No	NPZCC9	No
CV6GBQ	No	PJLLDE	No
DV2GNV	No	PYZUDH	No
E4DV7R	No	Q89DY7	No
EQKDBY	No	QX27AC	No
EYH29Q	No	R6JVAD	No
F87BVQ	No	R9EP8E	No
GJFB6P	No	RDUXVD	No

TABLE 1 - Item Q8

WebCode	Same Source?	WebCode	Same Source?
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VWBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q8</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	0	
No	56	
Unable To Determine	0	

TABLE 1 - Item Q9

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	No	GJZK4C	No
2RWRX8	No	HDJBZR	No
3YDAYQ	No	HRNUQD	No
4ADRZZ	No	HY6XNL	No
4NCLR9	No	J9RNXC	No
6KQBX2	No	K4CGAD	No
7WF37P	No	K7YPAL	No
8R3C8V	No	K9PNNJ	No
8RZUHP	No	KU2ENC	No
8V2M4V	No	LE89VA	No
9977EV	No	LFJFAH	No
9CLE3U	No	MD746L	No
9QLFFV	No	NFT6ME	No
A3UMP2	No	NLZ2F9	No
ALFPJ	No	NPZCC9	No
CV6GBQ	No	PJLLDE	No
DV2GNV	No	PYZUDH	No
E4DV7R	No	Q89DY7	No
EQKDBY	No	QX27AC	No
EYH29Q	No	R6JVAD	No
F87BVQ	No	R9EP8E	No
GJFB6P	No	RDUXVD	No

TABLE 1 - Item Q9

WebCode	Same Source?	WebCode	Same Source?
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VWBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q9</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	0	
No	56	
Unable To Determine	0	

TABLE 1 - Item Q10

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	No	GJZK4C	No
2RWRX8	No	HDJBZR	No
3YDAYQ	No	HRNUQD	No
4ADRZZ	No	HY6XNL	No
4NCLR9	No	J9RNXC	No
6KQBX2	No	K4CGAD	No
7WF37P	No	K7YPAL	No
8R3C8V	No	K9PNNJ	No
8RZUHP	No	KU2ENC	No
8V2M4V	No	LE89VA	No
9977EV	No	LFJFAH	No
9CLE3U	No	MD746L	No
9QLFFV	No	NFT6ME	No
A3UMP2	No	NLZ2F9	No
ALFPJ	No	NPZCC9	No
CV6GBQ	No	PJLLDE	No
DV2GNV	No	PYZUDH	No
E4DV7R	No	Q89DY7	No
EQKDBY	No	QX27AC	No
EYH29Q	No	R6JVAD	No
F87BVQ	No	R9EP8E	No
GJFB6P	No	RDUXVD	No

TABLE 1 - Item Q10

WebCode	Same Source?	WebCode	Same Source?
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VWBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q10</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	0	
No	56	
Unable To Determine	0	

TABLE 1 - Item Q11

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	No	GJZK4C	No
2RWRX8	No	HDJBZR	No
3YDAYQ	No	HRNUQD	No
4ADRZZ	No	HY6XNL	No
4NCLR9	No	J9RNXC	No
6KQBX2	No	K4CGAD	No
7WF37P	No	K7YPAL	No
8R3C8V	No	K9PNNJ	No
8RZUHP	No	KU2ENC	No
8V2M4V	No	LE89VA	No
9977EV	No	LFJFAH	No
9CLE3U	No	MD746L	No
9QLFFV	No	NFT6ME	No
A3UMP2	No	NLZ2F9	No
ALFPJ	No	NPZCC9	No
CV6GBQ	No	PJLLDE	No
DV2GNV	No	PYZUDH	No
E4DV7R	No	Q89DY7	No
EQKDBY	No	QX27AC	No
EYH29Q	No	R6JVAD	No
F87BVQ	No	R9EP8E	No
GJFB6P	No	RDUXVD	No



TABLE 1 - Item Q11

WebCode	Same Source?	WebCode	Same Source?
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VWBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q11</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	0	
No	56	
Unable To Determine	0	

TABLE 1 - Item Q12

WebCode	Same Source?	WebCode	Same Source?
2AG6HV	No	GJZK4C	No
2RWRX8	No	HDJBZR	No
3YDAYQ	No	HRNUQD	No
4ADRZZ	No	HY6XNL	No
4NCLR9	No	J9RNXC	No
6KQBX2	No	K4CGAD	No
7WF37P	No	K7YPAL	No
8R3C8V	No	K9PNNJ	No
8RZUHP	No	KU2ENC	No
8V2M4V	No	LE89VA	No
9977EV	No	LFJFAH	No
9CLE3U	No	MD746L	No
9QLFFV	No	NFT6ME	No
A3UMP2	No	NLZ2F9	No
ALFPJ	No	NPZCC9	No
CV6GBQ	No	PJLLDE	No
DV2GNV	No	PYZUDH	No
E4DV7R	No	Q89DY7	No
EQKDBY	No	QX27AC	No
EYH29Q	No	R6JVAD	No
F87BVQ	No	R9EP8E	No
GJFB6P	No	RDUXVD	No

TABLE 1 - Item Q12

WebCode	Same Source?	WebCode	Same Source?
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VWBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q12</b>		<b>Total Participants: 56</b>
Does each pair of the following collected single-print cards originate from the same source?		
<u>Same Source?</u>	<u>Total</u>	
Yes	0	
No	56	
Unable To Determine	0	

# Tenprint Comparisons

Do any of the Questioned tenprint cards (Q13-Q20) share a common source with any of the standard tenprint cards (A-H)?

TABLE 2 - Item Q13

WebCode	Common Source?	WebCode	Common Source?
2AG6HV	No	EYH29Q	No
2RWRX8	No	F87BVQ	No
3YDAYQ	No	GJFB6P	No
4ADRZZ	No	GJZK4C	No
4NCLR9	No	HDJBZR	No
6KQBX2	No	HRNUQD	No
7WF37P	No	HY6XNL	No
8R3C8V	No	J9RNXC	No
8RZUHP	No	K4CGAD	No
8V2M4V	No	K7YPAL	No
9977EV	No	K9PNNJ	No
9CLE3U	No	KU2ENC	No
9QLFFV	No	LE89VA	No
A3UMP2	No	LFJFAH	No
ALFPJ	No	MD746L	No
CV6GBQ	No	NFT6ME	No
DV2GNV	No	NLZ2F9	No
E4DV7R	No	NPZCC9	No
EQKDBY	No	PJLLDE	No

TABLE 2 - Item Q13

WebCode	Common Source?	WebCode	Common Source?
PYZUDH	No		
Q89DY7	No		
QX27AC	No		
R6JVAD	No		
R9EP8E	No		
RDUXVD	No		
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

**Response Summary - Q13**

**Total Participants: 56**

Do any of the Questioned tenprint cards (Q13-Q20) share a common source with any of the standard tenprint cards (A-H)?

<u>Common Source?</u>	<u>Total</u>	<u>Standard</u>
Yes	0	(N/A for non-associations)
No	56	
Unable To Determine	0	

TABLE 2 - Item Q14

WebCode	Common Source?	Standard	WebCode	Common Source?	Standard
2AG6HV	Yes	E	GJFB6P	Yes	E
2RWRX8	Yes	E	GJZK4C	Yes	E
3YDAYQ	Yes	E	HDJBZR	Yes	E
4ADRZZ	Yes	E	HRNUQD	Yes	E
4NCLR9	Yes	E	HY6XNL	Yes	E
6KQBX2	Yes	E	J9RNXC	Yes	E
7WF37P	Yes	E	K4CGAD	Yes	E
8R3C8V	Yes	E	K7YPAL	Yes	E
8RZUHP	Yes	E	K9PNNJ	Yes	E
8V2M4V	Yes	E	KU2ENC	Yes	E
9977EV	Yes	E	LE89VA	Yes	E
9CLE3U	Yes	E	LFJFAH	Yes	E
9QLFFV	Yes	E	MD746L	Yes	E
A3UMP2	Yes	E	NFT6ME	Yes	E
ALFPJ	Yes	E	NLZ2F9	Yes	E
CV6GBQ	Yes	E	NPZCC9	Yes	E
DV2GNV	Yes	E	PJLLDE	Yes	E
E4DV7R	Yes	E	PYZUDH	Yes	E
EQKDBY	Yes	E	Q89DY7	Yes	E
EYH29Q	Yes	E	QX27AC	Yes	E
F87BVQ	Yes	E	R6JVAD	Yes	E

TABLE 2 - Item Q14

WebCode	Common Source?	Standard	WebCode	Common Source?	Standard
R9EP8E	Yes	E			
RDUXVD	Yes	E			
U6LL8D	Yes	E			
U8WF8C	Yes	E			
VDHVBA	Yes	E			
VVBJLD	Yes	E			
W63927	Yes	E			
WF6YRZ	Yes	E			
XLQEVX	Yes	E			
XUFUB9	Yes	E			
YVBGNC	Yes	E			
YVQVX8	Yes	E			
Z3NDWW	Yes	E			
ZB2W83	Yes	E			

<b>Response Summary - Q14</b>			<b>Total Participants: 56</b>
Do any of the Questioned tenprint cards (Q13-Q20) share a common source with any of the standard tenprint cards (A-H)?			
<u>Common Source?</u>	<u>Total</u>	<u>Standard</u>	
Yes	56	E (56)	
No	0		
Unable To Determine	0		



TABLE 2 - Item Q15

WebCode	Common Source?	Standard	WebCode	Common Source?	Standard
2AG6HV	Yes	A	GJFB6P	Yes	A
2RWRX8	Yes	A	GJZK4C	Yes	A
3YDAYQ	Yes	A	HDJBZR	Yes	A
4ADRZZ	Yes	A	HRNUQD	Yes	A
4NCLR9	Yes	A	HY6XNL	Yes	A
6KQBX2	Yes	A	J9RNXC	Yes	A
7WF37P	Yes	A	K4CGAD	Yes	A
8R3C8V	Yes	A	K7YPAL	Yes	A
8RZUHP	Yes	A	K9PNNJ	Yes	A
8V2M4V	Yes	A	KU2ENC	Yes	A
9977EV	Yes	A	LE89VA	Yes	A
9CLE3U	Yes	A	LFJFAH	Yes	A
9QLFFV	Yes	A	MD746L	Yes	A
A3UMP2	Yes	A	NFT6ME	Yes	A
ALFPJ	Yes	A	NLZ2F9	Yes	A
CV6GBQ	Yes	A	NPZCC9	Yes	A
DV2GNV	Yes	A	PJLLDE	Yes	A
E4DV7R	Yes	A	PYZUDH	Yes	A
EQKDBY	Yes	A	Q89DY7	Yes	A
EYH29Q	Yes	A	QX27AC	Yes	A
F87BVQ	Yes	A	R6JVAD	Yes	A

TABLE 2 - Item Q15

WebCode	Common Source?	Standard	WebCode	Common Source?	Standard
R9EP8E	Yes	A			
RDUXVD	Yes	A			
U6LL8D	Yes	A			
U8WF8C	Yes	A			
VDHVBA	Yes	A			
VVBJLD	Yes	A			
W63927	Yes	A			
WF6YRZ	Yes	A			
XLQEVX	Yes	A			
XUFUB9	Yes	A			
YVBGNC	Yes	A			
YVQVX8	Yes	A			
Z3NDWW	Yes	A			
ZB2W83	Yes	A			

<b>Response Summary - Q15</b>			<b>Total Participants: 56</b>
Do any of the Questioned tenprint cards (Q13-Q20) share a common source with any of the standard tenprint cards (A-H)?			
<u>Common Source?</u>	<u>Total</u>	<u>Standard</u>	
Yes	56	A (56)	
No	0		
Unable To Determine	0		

TABLE 2 - Item Q16

WebCode	Common Source?	WebCode	Common Source?
2AG6HV	No	GJFB6P	No
2RWRX8	No	GJZK4C	No
3YDAYQ	No	HDJBZR	No
4ADRZZ	No	HRNUQD	No
4NCLR9	No	HY6XNL	No
6KQBX2	No	J9RNXC	No
7WF37P	No	K4CGAD	No
8R3C8V	No	K7YPAL	No
8RZUHP	No	K9PNNJ	No
8V2M4V	No	KU2ENC	No
9977EV	No	LE89VA	No
9CLE3U	No	LFJFAH	No
9QLFFV	No	MD746L	No
A3UMP2	No	NFT6ME	No
ALFPJ	No	NLZ2F9	No
CV6GBQ	No	NPZCC9	No
DV2GNV	No	PJLLDE	No
E4DV7R	No	PYZUDH	No
EQKDBY	No	Q89DY7	No
EYH29Q	No	QX27AC	No
F87BVQ	No	R6JVAD	No

TABLE 2 - Item Q16

WebCode	Common Source?	WebCode	Common Source?
R9EP8E	No		
RDUXVD	No		
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VVBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q16</b>		<b>Total Participants: 56</b>	
Do any of the Questioned tenprint cards (Q13-Q20) share a common source with any of the standard tenprint cards (A-H)?			
<u>Common Source?</u>	<u>Total</u>	<u>Standard</u>	
Yes	0	(N/A for non-associations)	
No	56		
Unable To Determine	0		

TABLE 2 - Item Q17

WebCode	Common Source?	WebCode	Common Source?
2AG6HV	No	GJFB6P	No
2RWRX8	No	GJZK4C	No
3YDAYQ	No	HDJBZR	No
4ADRZZ	No	HRNUQD	No
4NCLR9	No	HY6XNL	No
6KQBX2	No	J9RNXC	No
7WF37P	No	K4CGAD	No
8R3C8V	No	K7YPAL	No
8RZUHP	No	K9PNNJ	No
8V2M4V	No	KU2ENC	No
9977EV	No	LE89VA	No
9CLE3U	No	LFJFAH	No
9QLFFV	No	MD746L	No
A3UMP2	No	NFT6ME	No
ALFPJ	No	NLZ2F9	No
CV6GBQ	No	NPZCC9	No
DV2GNV	No	PJLLDE	No
E4DV7R	No	PYZUDH	No
EQKDBY	No	Q89DY7	No
EYH29Q	No	QX27AC	No
F87BVQ	No	R6JVAD	No

TABLE 2 - Item Q17

WebCode	Common Source?	WebCode	Common Source?
R9EP8E	No		
RDUXVD	No		
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VVBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q17</b>		<b>Total Participants: 56</b>	
Do any of the Questioned tenprint cards (Q13-Q20) share a common source with any of the standard tenprint cards (A-H)?			
<u>Common Source?</u>	<u>Total</u>	<u>Standard</u>	
Yes	0	(N/A for non-associations)	
No	56		
Unable To Determine	0		

TABLE 2 - Item Q18

WebCode	Common Source?	WebCode	Common Source?
2AG6HV	No	GJFB6P	No
2RWRX8	No	GJZK4C	No
3YDAYQ	No	HDJBZR	No
4ADRZZ	No	HRNUQD	No
4NCLR9	No	HY6XNL	No
6KQBX2	No	J9RNXC	No
7WF37P	No	K4CGAD	No
8R3C8V	No	K7YPAL	No
8RZUHP	No	K9PNNJ	No
8V2M4V	No	KU2ENC	No
9977EV	No	LE89VA	No
9CLE3U	No	LFJFAH	No
9QLFFV	No	MD746L	No
A3UMP2	No	NFT6ME	No
ALFPJ	No	NLZ2F9	No
CV6GBQ	No	NPZCC9	No
DV2GNV	No	PJLLDE	No
E4DV7R	No	PYZUDH	No
EQKDBY	No	Q89DY7	No
EYH29Q	No	QX27AC	No
F87BVQ	No	R6JVAD	No

TABLE 2 - Item Q18

WebCode	Common Source?	WebCode	Common Source?
R9EP8E	No		
RDUXVD	No		
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VVBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q18</b>		<b>Total Participants: 56</b>	
Do any of the Questioned tenprint cards (Q13-Q20) share a common source with any of the standard tenprint cards (A-H)?			
<u>Common Source?</u>	<u>Total</u>	<u>Standard</u>	
Yes	0	(N/A for non-associations)	
No	56		
Unable To Determine	0		



TABLE 2 - Item Q19

WebCode	Common Source?	WebCode	Common Source?
2AG6HV	No	GJFB6P	No
2RWRX8	No	GJZK4C	No
3YDAYQ	No	HDJBZR	No
4ADRZZ	No	HRNUQD	No
4NCLR9	No	HY6XNL	No
6KQBX2	No	J9RNXC	No
7WF37P	No	K4CGAD	No
8R3C8V	No	K7YPAL	No
8RZUHP	No	K9PNNJ	No
8V2M4V	No	KU2ENC	No
9977EV	No	LE89VA	No
9CLE3U	No	LFJFAH	No
9QLFFV	No	MD746L	No
A3UMP2	No	NFT6ME	No
ALFPJ	No	NLZ2F9	No
CV6GBQ	No	NPZCC9	No
DV2GNV	No	PJLLDE	No
E4DV7R	No	PYZUDH	No
EQKDBY	No	Q89DY7	No
EYH29Q	No	QX27AC	No
F87BVQ	No	R6JVAD	No

TABLE 2 - Item Q19

WebCode	Common Source?	WebCode	Common Source?
R9EP8E	No		
RDUXVD	No		
U6LL8D	No		
U8WF8C	No		
VDHVBA	No		
VVBJLD	No		
W63927	No		
WF6YRZ	No		
XLQEVX	No		
XUFUB9	No		
YVBGNC	No		
YVQVX8	No		
Z3NDWW	No		
ZB2W83	No		

<b>Response Summary - Q19</b>			<b>Total Participants: 56</b>
Do any of the Questioned tenprint cards (Q13-Q20) share a common source with any of the standard tenprint cards (A-H)?			
<u>Common Source?</u>	<u>Total</u>	<u>Standard</u>	
Yes	0	(N/A for non-associations)	
No	56		
Unable To Determine	0		

TABLE 2 - Item Q20

WebCode	Common Source?	Standard	WebCode	Common Source?	Standard
2AG6HV	Yes	G	GJFB6P	Yes	G
2RWRX8	Yes	G	GJZK4C	Yes	G
3YDAYQ	Yes	G	HDJBZR	Yes	G
4ADRZZ	Yes	G	HRNUQD	Yes	G
4NCLR9	Yes	G	HY6XNL	Yes	G
6KQBX2	Yes	G	J9RNXC	Yes	G
7WF37P	Yes	G	K4CGAD	Yes	G
8R3C8V	Yes	G	K7YPAL	Yes	G
8RZUHP	Yes	G	K9PNNJ	Yes	G
8V2M4V	Yes	G	KU2ENC	Yes	G
9977EV	Yes	G	LE89VA	Yes	G
9CLE3U	Yes	G	LFJFAH	Yes	G
9QLFFV	Yes	G	MD746L	Yes	G
A3UMP2	Yes	G	NFT6ME	Yes	G
ALFPJ	Yes	G	NLZ2F9	Yes	G
CV6GBQ	Yes	G	NPZCC9	Yes	G
DV2GNV	Yes	G	PJLLDE	Yes	G
E4DV7R	Yes	G	PYZUDH	Yes	G
EQKDBY	Yes	G	Q89DY7	Yes	G
EYH29Q	Yes	G	QX27AC	Yes	G
F87BVQ	Yes	G	R6JVAD	Yes	G

TABLE 2 - Item Q20

WebCode	Common Source?	Standard	WebCode	Common Source?	Standard
R9EP8E	Yes	G			
RDUXVD	Yes	G			
U6LL8D	Yes	G			
U8WF8C	Yes	G			
VDHVBA	Yes	G			
VVBJLD	Yes	G			
W63927	Yes	G			
WF6YRZ	Yes	G			
XLQEVX	Yes	G			
XUFUB9	Yes	G			
YVBGNC	Yes	G			
YVQVX8	Yes	G			
Z3NDWW	Yes	G			
ZB2W83	Yes	G			

<b>Response Summary - Q20</b>			<b>Total Participants: 56</b>
Do any of the Questioned tenprint cards (Q13-Q20) share a common source with any of the standard tenprint cards (A-H)?			
<u>Common Source?</u>	<u>Total</u>	<u>Standard</u>	
Yes	56	G (56)	
No	0		
Unable To Determine	0		

# Additional Comments

TABLE 3

WebCode	Additional Comments
2RWRX8	First and second level analysis is performed.

-End of Report-  
(Appendix may follow)

## Test No. 24-5141: Tenprint Examination

DATA MUST BE SUBMITTED BY **July 08, 2024, 11:59 p.m. EDT** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A

WebCode: F7QKUE

### Scenario:

The following prints, including single-print card pairs and tenprint cards, are in need of manual comparison. For the single prints, please compare the like-numbered Questioned and Standard print pairs to determine if they originate from the same source. For the tenprint cards, please compare each Questioned item to the pool of Standard items to determine if any of the Questioned tenprint cards share a common source with any of the Standard tenprint cards.

*For the single print pairs, open the like-numbered Questioned and Standard files and compare the two prints.*

*For the tenprint cards, open a Questioned file and compare it to each Standard file. If a match is found, indicate the letter of the Standard card that was identified as sharing a common source with the Questioned card.*

*The files within the 'TIF' and 'JPG' folders are the same items, just provided in different formats.*

*For this test, you are not limited to conducting only on-screen comparisons and may employ any other method you wish. However, because of differences in printing technology, CTS cannot guarantee the quality of images you print from the digital media.*

### Items Submitted (Sample Pack TPE):

Items Q1-Q12: Twelve single-print card pairs, in TIF and JPG formats.

Items Q13-Q20: Eight questioned tenprint cards, in TIF and JPG formats.

Items A-H: Eight standard tenprint cards for comparison to Q13-Q20, in TIF and JPG formats.

To verify a complete and accurate download, the hash value for the downloaded .ZIP file is as follows:

24-5141 Tenprint Examination.zip MD5 hash value: 61dc601115a9fb3707e2b61d2ba42330

24-5141 Tenprint Examination.zip SHA1 hash value: 4f75fdd3c6439dd1d78d643475a6ffe66670ae12

**1.) Does each pair of the following collected single-print cards originate from the same source?**

\*If "Unable to Determine" is selected, please explain your reasoning in the Additional Comments.

	Yes	No	Unable to Determine*
Q1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Yes	No	Unable to Determine*
Q5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Yes	No	Unable to Determine*
Q9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**2.) Do any of the Questioned tenprint cards (Q13-Q20) share a common source with any of the Standard tenprint cards (A-H)? If so, please identify the letter of the Standard card with which a common source is shared.**

\*If "Unable to Determine" is selected, please explain your reasoning in the Additional Comments.

	Yes	No	Unable to Determine*
Q13	<input type="radio"/> <input type="text"/>	<input type="radio"/>	<input type="radio"/>
Q14	<input type="radio"/> <input type="text"/>	<input type="radio"/>	<input type="radio"/>
Q15	<input type="radio"/> <input type="text"/>	<input type="radio"/>	<input type="radio"/>
Q16	<input type="radio"/> <input type="text"/>	<input type="radio"/>	<input type="radio"/>

	Yes	No	Unable to Determine*
Q17	<input type="radio"/> <input type="text"/>	<input type="radio"/>	<input type="radio"/>
Q18	<input type="radio"/> <input type="text"/>	<input type="radio"/>	<input type="radio"/>
Q19	<input type="radio"/> <input type="text"/>	<input type="radio"/>	<input type="radio"/>
Q20	<input type="radio"/> <input type="text"/>	<input type="radio"/>	<input type="radio"/>



### 3.) 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 responses in lists and tabular formats.*

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

A2LA Certificate No.

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

Authorized Contact Person and Title

Laboratory Name

Location (City/State)