

Collector Tip Sheet

What Makes a Good Quality Print?

We've been getting some questions on the best way to capture quality prints, so we thought we'd share some tips to assist you. Good quality prints require good technique and optimum equipment setup to produce prints with good surface, contrast, and positioning. Each of these factors contributes to the ability of the FBI/FDLE to match the prints we capture with prints in their systems.

Each factor is defined below with examples of good quality and poor quality prints. For additional information on capturing prints and tips, please visit <http://www.fbi.gov/hq/cjisd/takingfps.html>.

Equipment Setup

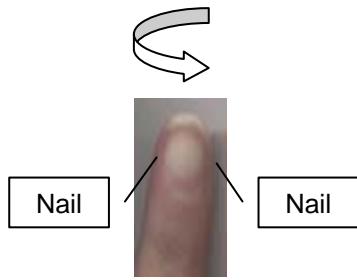
The **ideal height** for fingerprinting (whether CardScan or LiveScan) allows the applicant's forearm to be parallel to the floor. The FBI recommends a height of approximately 39 inches*. If it cannot be placed at this height, be sure that the finger does not rise off of the device during the capture. The applicant should be directly in front of and about a forearm's length away from the device.

Surface

A good quality print shows a lot of surface. To make a good comparison between the fingerprints we submit and the fingerprints the FBI/FDLE has on file, enough of the skin's surface must be captured.

How do you ensure that you capture enough of the surface? For rolled prints, ensure that you roll from one side of the nail bed to the other and that the top of the finger to just below the knuckle is captured. A **good quality rolled print** looks like a rectangle while a **poor quality rolled print** looks like an oval.

* retrieved from <http://www.fbi.gov/hq/cjisd/takingfps.html>



Technique



Good Surface Quality
(rectangle print)



Poor Surface Quality
(oval print)

For flat prints, ensure that you capture the top of the finger to below the knuckle. A **good quality flat thumbprint** looks like a little like a shoe print.



Good Surface Quality
(captured top to
below first knuckle)



Poor Surface Quality
(did not capture
below first knuckle)

Good quality flat four fingerprints should be angled to a point where all four fingers are captured (including the little finger) below the first knuckle whenever possible.



Good Surface Quality
(captured all four
fingers below the
first knuckle)



Poor Surface Quality
(did not capture all
four fingers below the
first knuckle and first
finger cutoff)

Contrast

Poor quality fingerprints are too dark, too light, uneven, or smudged. Too dark fingerprints are a result of too much ink (CardScan) or too much pressure (LiveScan). Too light fingerprints are a result of too little ink (CardScan) or too little pressure (LiveScan). A **good quality fingerprint** is light gray in color.

Poor quality fingerprints are uneven or smudged and occur when the print is not captured in a smooth roll (the roll is started, stopped, and started again). A **good quality fingerprint** clearly displays patterns (whorls, loops, arches, etc.).



Good Contrast Quality
(Good color and clear patterns)



Poor Contrast Quality
(Too Light)



Poor Contrast Quality
(Too Dark)

Positioning

Poor quality fingerprints do not fit within the designated area and may overlap into other areas of the fingerprint card or SafeWeb system. A **good quality fingerprint** does not overlap.



Good Positioning Quality
(prints do not overlap)



Poor Positioning Quality
(prints overlap)

What About Prints That Are Difficult To Capture?

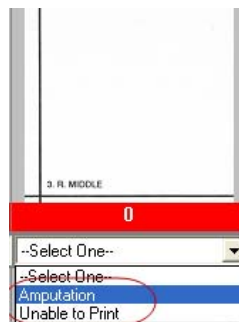
At times, you will have an applicant whose fingerprints are difficult to capture. This may be due to skin that is too soft, too dry, or the skin is worn down (some occupations wear down an applicant's fingerprints). Here are some tips you can use to help you in those times:

- Ensure that the applicant's fingers are clean and dry
- If using the LiveScan device, use a small amount of Cornhusker's lotion
- If you have it available, try using ice cubes on the finger to raise the print
- Apply a small amount of pressure and rub the finger in a downward motion (especially useful for worn prints). This action may help raise the print.

What About Missing Digits?

If someone is missing a digit or otherwise cannot be printed (e.g. an individual has a cast covering one or more fingers), the SAFE™ System allows you to indicate the reason for the missing prints.

When capturing the prints in the system, select either Amputation for missing digit(s) or Unable to Print for those times when the digit cannot be printed due to casts, bandages that cannot be removed, etc. These selections are available from the drop down list as shown below.



Did You Know?

Identical twins DO NOT have identical fingerprints. Fingerprints are not a genetic characteristic – the shape of a fingerprint is determined by environmental factors during pregnancy like nutrition, position in the womb, etc. While identical twin fingerprints are similar, they are not, in fact, identical. *

Was This Helpful?

Between good technique and optimum equipment setup, operators should be able to produce good quality prints time and time again. We hope this tip sheet has been helpful to you. Should you need additional information on this or other topics, please contact Customer Service 1-877-423-5265 or support@priderockholdings.com.

* information retrieved from <http://multiples.about.com/cs/funfacts/a/twinfingerprint.htm> and http://www.hhmi.org/bulletin/may2007/pdf/ask_scientist.pdf