Live Scan Machine Requirements and Specifications

- The proposed live scan system must capture slap/roll images greater than 1000ppi in at least one dimension. Describe how the system accomplishes this.
- The proposed live scan system must ignore moisture in the skin enabling the capture of clear, high quality prints without having to dry the fingers before capture or heating the platen. Describe how the system accomplishes this.
- The proposed live scan system must be able to capture clear high quality prints without the use of hand conditioning or removable silicon pads. Describe how the system accomplishes this.
- The proposed live scan system must provide gray scale that is representative of the true gray tones as seen by the scanner's camera. Describe how the system accomplishes this. Provide uncompressed, digital, raw data fingerprint images to demonstrate compliance with this requirement.
- Specify the signal-to-noise ratio of the proposed live scan system as a percentage greater than FBI Appendix F Certification Requirements. Describe how the system accomplishes this.
- Describe in quantitative terms the geometric accuracy of the proposed live scan system as a percentage greater than FBI Appendix F Certification Requirements. Describe how the system accomplishes this.
- The proposed live scan system must support roll capture that eliminates tearing, smearing and smudging of fingerprint images due to movement of the finger on the capture platen. Describe how the system accomplishes this.
- Describe in quantitative terms the CTF/MTF performance of the proposed live scan system as a percentage greater than the FBI Appendix F Certification Requirements. Describe how the system accomplishes this, with a graph if possible.
- The proposed live scan system must provide even illumination over the entire platen surface. Uniform background white level must be achieved by equalizing illumination to better than a 5% variation across the field of view. Describe how the system accomplishes this.

- The proposed live scan system must allow the operator to adjust the height of the platen to a level that is comfortable for the operator and allows for optimal placement of fingers and hands during the capture process. Describe how the system accomplishes this.
- The proposed live scan system must incorporate a permanent prism treatment to avoid the image degradation that occurs with replaceable silicon pads.
- The system must have been certified under the FBI IAFIS IQS with or without membrane and to be able to be used either way, not one or the other.
- The user must not be required to perform installation of new silicon pads.
- The proposed live scan system must not require the use of silicon pads that are not covered by warranty or maintenance agreements and would therefore be a hidden cost of operation. Describe how the system accomplishes this.
- The proposed live scan system must be completely sealed and impervious to dust and moisture often encountered in processing environments. Describe how the system accomplishes this.
- The proposed live scan system must not incorporate heated platens to minimize the effect of condensation from warm moist fingers on the platen. Describe how the system accomplishes this.
- The proposed live scan system must provide the operator with real time feedback on the quality of the fingerprint just capture. Feedback must include image size (rolled prints), smear, and light and dark images. Describe how the system accomplishes this.
- The proposed live scan system must be capable of capturing a high quality full hand capture meeting or exceeding FBI standards.
- The proposed live scan system must provide a high quality printer, capable of printing the captured prints onto Criminal FD-249 cards, R-84 Final Disposition Reports, Standard FD-258 cards, and the Criminal Ident/ Non-Ident responses received from the TBI.
- The live scan vendor must provide Help Desk support 24 hrs a day 7 days a week for the proposed live scan system. The average response time must be less than 10 minutes.