Technical Procedure for the Nikon D100 Digital Camera

1.0 Purpose - This procedure describes how to photograph evidence with the Nikon D100 digital camera.

2.0 Scope - This procedure applies to photographs taken with the Nikon D100 digital camera. This camera is used to preserve developed latent impressions, allowing the Forensic Scientist to maintain the developed impressions, use them for examinations and disseminate them to the appropriate agencies in a permanent manner. This particular camera may also be used in overall photography at crime scenes or to record unique items of evidence.

3.0 Definitions – N/A

4.0 Equipment, Materials and Reagents

4.1 Equipment and Materials

- Nikon D100 digital camera
- Compact flash media card

4.2 Reagents – N/A

5.0 Procedure – The Nikon D100 camera is relatively simple to operate; however, it does contain numerous options. To use the specialized photographic techniques or record other unique images, the Forensic Scientist shall consult and follow the owner's manual. The following procedures apply to photography of latent impressions for comparison purposes.

5.1 Standard Photography

5.1.1 Ensure that the camera contains a compact flash card with enough free space to record the impressions or areas of interest.

5.1.2 Set the camera mode to "A" for Aperture Priority and set the aperture to F16.

5.1.3 Set the focus switch on the lens to "M" for manual focus.

5.1.4 Place a scale near the impression to be photographed.

5.1.5 Align the impression and the scale in the viewfinder, set the focus and take the photograph.

5.2 Photography with lasers and/or alternate light sources

5.2.1 Ensure that the camera contains a compact flash card with enough free space to record the impressions or areas of interest.

5.2.2 Place the orange filter (or other appropriate filter) on the 60mm lens.

5.2.3 Set the camera mode to "A" for Aperture Priority and set the aperture to F16.

5.2.4 Set the focus switch on the lens to "M" for manual focus.

5.2.5 Place a scale near the impression to be photographed.

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5.2.6 Align the impression and the scale in the viewfinder, set the focus and take the photograph.

Note: When photographing latent impressions, bracket photographs to ensure the images are recorded correctly. Press the "+/-"exposure compensation button next to the shutter button while turning the wheel at the front of the camera to bracket in 1/3 stop increments.

5.2.7 To avoid camera movement, a tripod and shutter release shall be used when photographing latent impressions.

5.3 Preservation of Photographed Impressions – The image processing system shall be used to preserve identifiable latent impressions and to create 1:1 prints for comparison purposes (see Section Image Processing Technical Procedure). **Note:** All images (e.g., photographs, latent lifts, and impressions) shall be retained in the Case Record Object Repository.

5.4 Standards and Controls – N/A

5.5 Calibration – N/A

5.6 Sampling – N/A

5.7 Calculations – N/A

5.8 Uncertainty of Measurement – N/A

6.0 Limitations

6.1 Store compact flash cards in the case provided or in the camera.

6.2 Store the Nikon D100 digital camera on the copy stand or in a cool, dry place.

6.3 The Nikon D100 offers some of the most advanced photographic techniques available; therefore, refer to the owner's manual for additional information on the operating modes and settings.

7.0 Safety – N/A

8.0 References

Duncan, C.D. *Advanced Crime Scene Photography*. CRC Press, New York (2010).

Krauss, T.C. and S.C. Warlen. "The Forensic Science Use of Reflective Ultraviolet Photography." *Journal of Forensic Sciences.* (1984): 262 – 268.

McDonald, J.A. *Close-Up & Macro Photography*. 2nd Edition. Phototext Books (1992).

Redsicker, D.R. *The Practical Methodology of Forensic Photography.* Elsevier Science Publishing Co., Inc. New York (1991).

9.0 Records – N/A

10.0 Attachments – N/A

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Revision History		
Effective Date	Version Number	Reason
09/17/2012	1	Original Document

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