



Scientific Working Group on Digital Evidence

Guidelines for Evidence Photography in a Controlled Setting

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1. Purpose

The purpose of this document is to provide guidelines on evidence photography in a controlled setting to document the condition before, during, and after the analysis of evidence items. The information in this document is not intended for comparative analysis.

2. Scope

Documentation images capture what an item looks like, or the features of an item that may be relevant. This may assist in understanding the visual attributes of an item. These images typically fall under notes or work products.

3. Equipment Recommendations

Please refer to *SWGDE 16-P-002-1.0 Photographic Equipment and Infrastructure Recommendations* prior to implementation of new equipment or procedures.

- Digital camera
 - Point and Shoot
 - Mobile device with camera
 - Mirrorless interchangeable lens camera (MILC)
 - Digital Single-Lens Reflex (DSLR)
- Lenses
- Tripod or copy stand (optional)
- Forensic scales of various sizes
- Digital storage media
- Light sources, e.g., studio lighting, flashlights, external flash

4. Considerations

4.1 Number and Type of Photos

Many items can be documented appropriately with one photograph. Some items will require multiple photographs to capture all the relevant details. This may require taking a systematic series of photographs that start with an overall photograph of the evidence item and progress to mid-range and close-up photos, as needed.

4.2 Camera Position

When the size or dimensions of an item is important, the position of the camera is critical to document the item accurately.

The camera's sensor plane should be positioned parallel to the item being photographed. The use of a tripod or copy stand with integrated lighting may be necessary.



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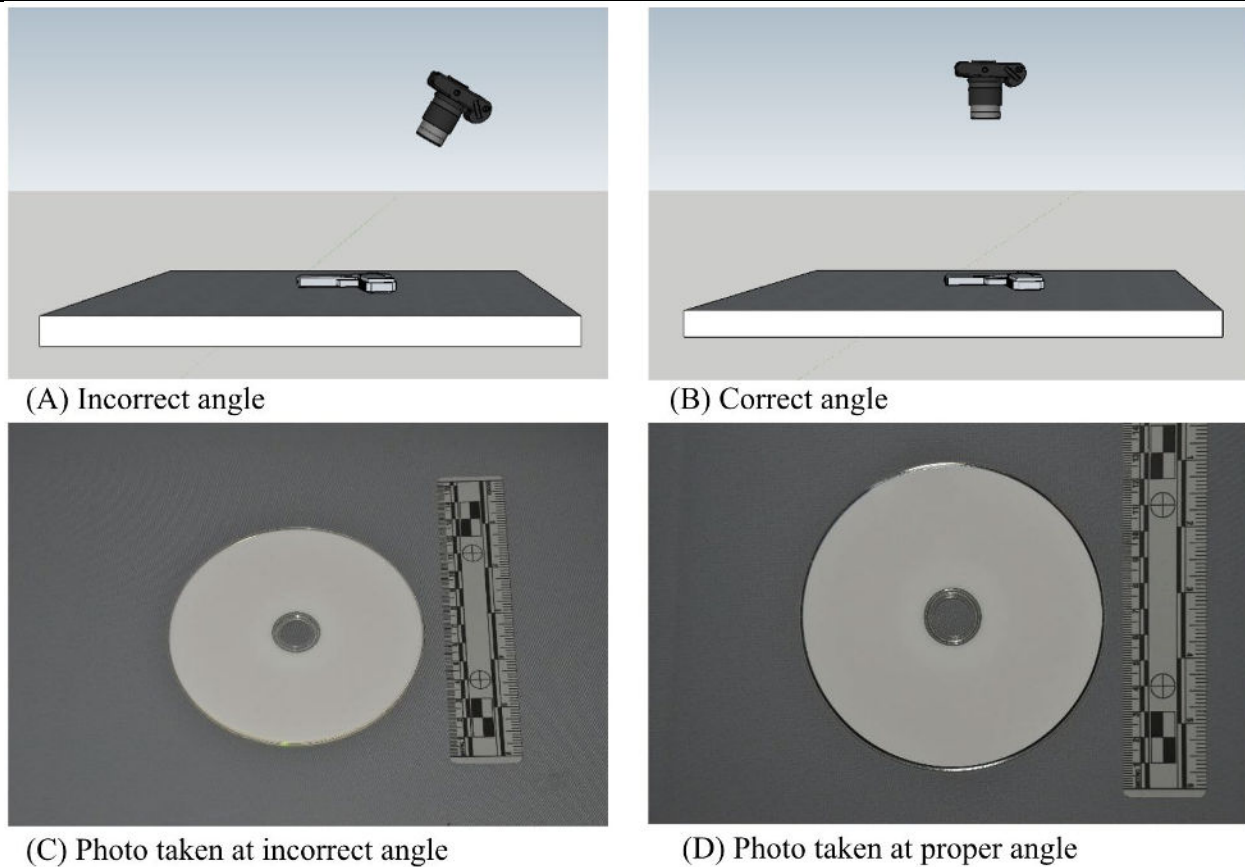


Figure 1. Demonstration of camera position.

4.3 Scaling

The use of forensic scales may not always be necessary; however, when used, they provide a way to document the relative, physical size of the item being photographed.

The scale should be appropriate for the evidence being photographed and placed on the same plane. If not, the item may appear larger or smaller than the true physical size.

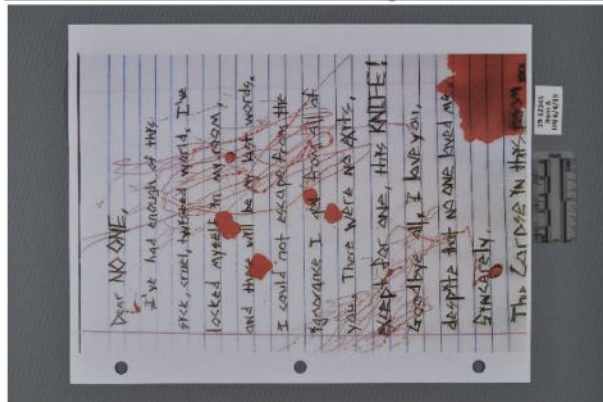
If other features are present, e.g., blood stains, bullet defects, other scales can be placed on the item to illustrate their size.

The scale should be placed as close to the item as possible without obstructing details of the item. If necessary, scales may be placed on the item, as long as the scale does not obscure any pertinent details. If the scale is to be placed on the item, photograph the item without a scale prior to placing a scale on the item for any additional photographs. Care should be taken not to alter any potential evidence, e.g., latent prints, DNA, trace evidence.

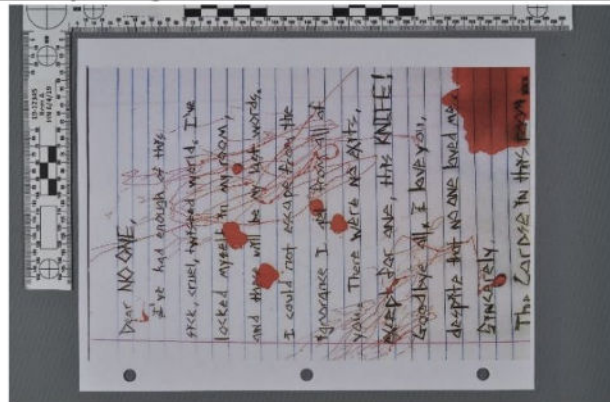
Scales should be sanitized between use on different items of evidence to avoid contamination.



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(A) Scale is too small.



(B) Proper sized scale.



(C) Scale is at a lower plane than the item (appears smaller than actual size).



(D) Scale is in the same plane as the item (actual size).

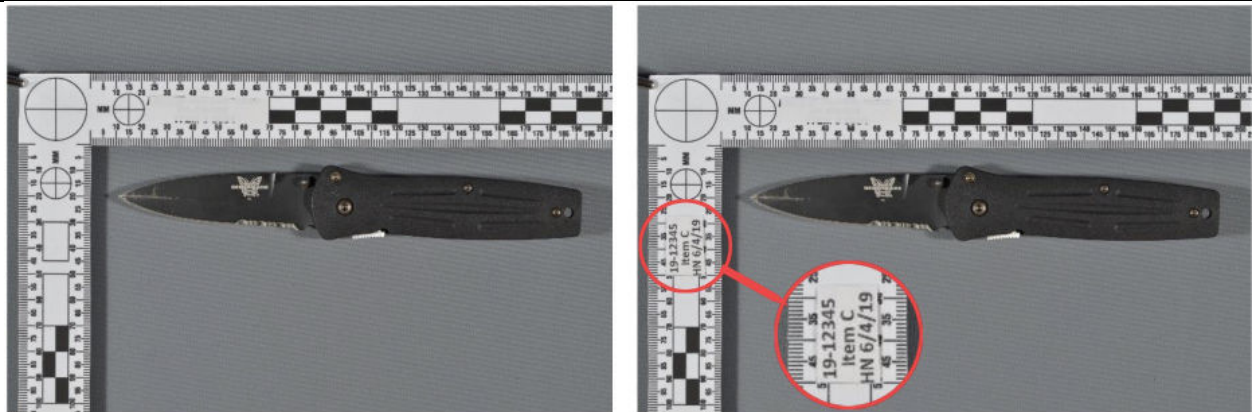
Figure 2. Demonstration of using scales.

4.4 Labeling and Descriptors

The image should contain descriptors that allow the item to be readily identifiable. Descriptors should include case number, item number, date, initials of photographer, etc. Directly labeling an item may be an option, but the descriptors can also be placed on a placard within the frame of the photograph. Care should be taken not to alter any potential evidence, e.g., latent prints, DNA, trace evidence.



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(A) No item information in photo, no placard. (B) Photo with proper item information.

Figure 3. Demonstration of labeling.

4.5 Image Composition

The item being photographed should fill the frame. By filling the frame, it is maximizing the amount of detail captured by using as much of the camera sensor as possible. The item should be placed on a neutral background of contrasting color. The entire scale does not need to be captured; only enough of the scale needs to be shown to be able to determine the units of measurement being displayed.¹



(A) Frame 25% filled.

(B) Properly filled frame.

Figure 4. Demonstration of image composition.

¹ Note: Leaving a little space around the edges of the item and the frame will allow for incidental cropping of the image that may occur at capture.



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4.6 Focus

Having a properly focused image is critical to ensure all of the necessary details are captured. The camera may focus automatically or manually depending on what focusing mode the camera is set to. Manual focus is often the most reliable way to ensure there is sharp focus from top to bottom and from side to side. The focus should be checked, either through the viewfinder, or the live projection on a screen (computer or camera) prior to capturing the image. Images should also be reviewed after capture to ensure sharp focus was achieved.



(A) Out of focus.



(B) Properly focused

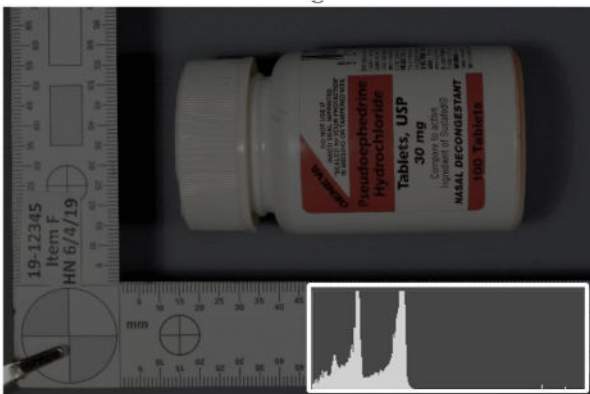
Figure 5. Demonstration of focus.

4.7 Exposure

Ensure the item is properly exposed to show all of the details of the object. This can be accomplished in several ways, including the use of a flash, external light sources, or adjusting camera settings. Utilizing a camera's histogram may further assist in obtaining proper exposure.



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(A) Under-exposed



(B) Correctly exposed



(C) Over-exposed

Figure 6. Demonstration of exposure.

5. Workflow Example

1. Ensure that the camera's settings are appropriate for the needs of the documentation or request. This includes the camera's time/date, white balance, image file format, image size, shutter speed, ISO, and aperture.
2. Place the item on a flat surface with a neutral background.
3. Place the camera's sensor plane parallel to the item being photographed when the size or dimensions of an item are important.²
4. Place appropriate measurement scale(s) on the same plane and next to the item.
5. Place a label or descriptor that provides a unique identifier in the field of view for the item being photographed.

² Note: There may be instances where a different perspective is important and does not allow for the camera to be parallel to the item being photographed.



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6. Fill the camera's frame with the item and scale, and ensure the item is in focus.
 7. Ensure the object is evenly illuminated to show detail in the object without distracting or harsh shadows, glare or reflections.
 8. Capture and evaluate the image to determine if it is of sufficient quality.
 9. Repeat steps as necessary, with appropriate adjustments.

6. Additional Resources

- Scientific Working Group on Digital Evidence. *Photographic Equipment and Infrastructure Recommendations*. SWGDE 16-P-002-1.0. *SWGDE*, 2016, <https://www.swgde.org/16-p-001/>.



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7. History

Revision	Issue Date	History
1.0 DRAFT	7/9/2018	Initial draft created.
1.0 DRAFT	9/20/2018	Draft updated and SWGDE voted to release as a Draft for Public Comment.
1.0 DRAFT	11/20/2018	Formatted for release as a Draft for Public Comment.
1.0	6/6/2019	No comments received during the public comment period. SWGDE voted to approve as a Final Approved Document.
1.0	7/16/2019	Formatted for release as a Final Approved Document.
2.0 DRAFT	5/14/2024	Major editorial revisions made for the document's five-year review. Retired document from "SWGDE General Photography Guidelines for the Documentation of Evidence Items in the Laboratory" to "Guidelines for Evidence Photography in a Controlled Setting." SWGDE voted to approve as a Draft for Public Comment. Formatted for release as a Draft for Public Comment.
2.0	2/21/2025	No comments received. SWGDE voted to approve as a Final Approved Document.
2.0	2/28/2025	Formatted for release as a Final Approved Document.