

Latent Print Evidence Imaging Resolution



WHAT IS AN AAFS STANDARD FACTSHEET?

The AAFS produces clear, concise, and easy to understand factsheets to summarize the contents of technical and professional forensic science standards on the OSAC Registry. They are not intended to provide an interpretation for any portion of a published standard.

WHAT IS THE PURPOSE OF THIS STANDARD?

This standard provides requirements for latent print imaging resolution to ensure they are of sufficient quality.

A wide variety of digital cameras and flatbed scanners are used to capture latent print images. This standard was developed to provide guidance on the resolution and testing of equipment that is used to image friction ridge detail in a latent print. Many factors can affect the quality of an image recorded with a camera or flatbed scanner.

This standard provides information on the equipment, file settings, procedures, and targets required to test a camera or flatbed scanner's ability to accurately document friction ridge details such as pores, incipient ridges, and edge shapes.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

High quality images are essential for the proper documentation and comparison of friction ridge detail.

This standard is important because it provides a standardized way to test the ability of a camera or flatbed scanner to resolve small features that may be present in friction ridge detail.

Adherence to the standard ensures that friction ridge images are of sufficient quality, and that they are collected by practitioners in a consistent manner.



HOW IS THIS STANDARD USED AND WHAT ARE THE KEY ELEMENTS?

This standard provides information on how to test and determine if a digital camera configuration (camera and lens) or a flatbed scanner can record the minute details found within friction ridges. For camera systems, it is also possible to determine the maximum distance the camera can be from the area being imaged and still record information within the recommended resolution.

Instructions are provided on how to create a physical template for individual camera and lens configurations. This will assist in visualizing the area of coverage that can be recorded and still remain within the recommended resolution.

This standard provides the applicable terminology, equipment recommendations/configurations, and the step-by-step procedure to test the imaging equipment utilizing one of the suggested certified test charts. Additional factors, such as camera settings and file settings are explained, as well as how these settings can affect the resulting images. Examples are illustrated or explained showing additional factors that must be considered when capturing images for comparison purposes.

Undesirable results, such as image distortion due to the lens selection, or data being discarded due to compression or file settings, are also addressed in this standard.

The standard also provides guidance on how to avoid such situations.