Forensic Light Sources

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Forensic Light Sources

1 INTRODUCTION/SCOPE

Forensic Light Sources are used by FBI Laboratory Friction Ridge Discipline personnel before any processing is conducted in order to visualize any inherent fluorescence and are also used in conjunction with certain processes that may result in fluorescence or improved contrast.

2 LIMITATIONS

- A. Fluorescent compounds will suffer from loss of fluorescent intensity over time; as such, fluorescent prints will be captured as soon as is practicable.
- B. Short-wave ultraviolet light (254nm) is detrimental to DNA examinations.

3 EQUIPMENT

- Coherent TracER LASER (532nm)
- Dual77 Investigation LASER (520nm/445nm)
- Blue Forensic Light Source (450nm)
- Long-wave ultraviolet Forensic Light Source (365nm)
- Short-wave ultraviolet Forensic Light Source (254nm)
- Reflective Ultraviolet Imaging System (RUVIS)
- CrimeScope[®] (Ultraviolet 300-400nm, 415nm, 445nm, 455nm, 475nm, 495nm, CrimeSceneScope [Crime Scene Search short pass filter SP530nm], 515nm, 535nm, 555nm, SP575nm, 600nm, 630nm, 670nm, white light and infrared output)
- Other Forensic Light Sources
- Barrier filter or eye-wear with appropriate barrier filter

4 PROCEDURE

- A. Personnel will complete the following steps:
 - 1. Use appropriate barrier filter(s) (e.g., protective eye wear) and ensure it matches or exceeds Forensic Light Source's wavelength.
 - 2. Adjust or select the appropriate Forensic Light Source intensity and/or wavelength as necessary and available.
 - 3. View evidence using the Forensic Light Source.
 - For digital capture and photography, see *Processing Overview* (<u>FRD-300</u>).

5 SAFETY

See FBI <u>Laboratory Safety Manual</u> for appropriate information.

6 **REVISION HISTORY**

Revision	Issued	Changes
02	07/15/21	 Replace Latent Print Units with Friction Ridge Discipline. Minor wording changes. Re-organization and re-numbering of sections. Section 1 - removed "any type of". Section 3 - updated equipment. Section 4 - streamlined procedures.
03	05/16/2022	Reformatted