

**TENNESSEE BUREAU OF INVESTIGATION**  
*Forensic Services Division*

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Violent Crime Response Team Standard Operating Procedures  
Definitions

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## 11. Definitions and Abbreviations

1:1 – natural size or to scale

Alternate Light Source – A device that has the ability to cycle between single or narrow wavelengths of light

ALS – Alternate Light Source

Ballistics – the science or study of the motion of projectiles, such as bullets, shot pellets, etc.

Catalyze – to modify, especially to increase, the rate of (a chemical reaction) by catalysis

Chemiluminescence – the emission of light (luminescence) with limited emission of heat as the result of a chemical reaction

Deflection – amount of deviation due to impact

Dental stone – a calcined gypsum derivative, used for making dental casts

Deoxyribonucleic Acid (DNA) – The basic human genetic material

Departure angle – angle at which something is launched

DNA – Deoxyribonucleic Acid, The basic human genetic material

Electrostatic – of or relating to electric charges at rest

Electrostatic Dust Print Lifter – a device that creates a charge across a Mylar film to lift dust off a surface

False positive – a test that yields a positive result but the substance is not actually the substance of interest

Fingerprint - the friction ridge pattern found on the surface of the fingers

Firearm – a weapon, especially a pistol or rifle, capable of firing a projectile and using an explosive charge or compressed gas as a propellant

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Friction ridge pattern - the ridges on the palmar and plantar surfaces that create a fingerprint or toe print

Gelatin Lifter – a soft gelatinous sheet with one side having an adhesive surface used to lift print powder or dusty footwear impressions off a surface

Hemoglobin – The iron-containing respiratory pigment in red blood cells of vertebrates, consisting of about 6% heme and 94% globin

Impression – mark produced on a surface by pressure

Incident angle – is a measure of deviation of something from "straight on"

JPG or JPEG – is a commonly used method of compression for photographic images

Latent – present or potential but not evident or active (a fingerprint or shoetrack that is not apparent to the eye but can be made sufficiently visible, as by dusting or fuming, for use in identification)

LCV – Leucocrystal Violet

Leucocrystal Violet – Is used to enhance and develop prints deposited in blood

Luminol – is a chemiluminescent compound used to locate minute amounts of blood not visible to the naked eye

Nm – Nanometer

Oblique - Neither parallel nor at a right angle to a specified or implied line; slanting

Oxidation – A reaction in which the atoms in an element lose electrons and the valence of the element is correspondingly increased

Palmar – the palms of bare hands

Peroxidase – any of a group of enzymes that occur especially in plant cells and catalyze the oxidation of a substance by a peroxide

Plantar – the soles of bare feet

Point cloud – a collection of measured points that are collected and stored specifically by the Leica Forensic Scanstation

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Presumptive test – a test of a sample which helps establish whether:

- The sample is definitely **not** a certain substance
- The sample **most likely** is the substance

Print – a mark or impression made in or on a surface by pressure

RAW – A camera file format that has not yet been processed and therefore must be processed in a computer program

Ricochet - the motion of an object or a projectile in rebounding or deflecting one or more times from the surface over which it is passing or against which it hits a glancing blow

RUVIS – Reflective Ultraviolet Light Imaging System

Safe – secure from danger, harm, risk or injury

Seal – to close and prevent from opening unexpectedly

Serology – the scientific study or examination of blood and other body fluids

Shoe Print – A 2-dimensional representation of the tread design left on a surface

Shoe Track – A 3-dimensional representation of the tread design left in a pliable material

Submerge – to cover or overflow with water; immerse

TBI – Tennessee Bureau of Investigation

Three-dimensional – having or existing in three dimensions, Width, Length and Depth

TIF – A file format that has no loss of data or compression

Tire Print – A 2-dimensional representation of the tread design left on a surface

Tire Track – A 3-dimensional representation of the tread design left in a pliable material

Trajectory – the curve described by a projectile in its flight

Two-Dimensional – having or existing in two dimensions, Width and Length

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VCRT – Violent Crime Response Team