



VISIA COMPLEXION ANALYSIS SYSTEM

With the use of standard cross-polarized and UV photography at a wavelength of 365nm, the surface and subsurface of the skin's condition can be measured. This works by means of the newest technology called RBX (Canfield Imaging Systems) which allows the device to see beneath the skin's surface, detecting any abnormalities that include abnormal melanin concentrations (hyperpigmentation), sun damage or any vascular disorders.

An image of the skin is captured under polarized illumination with a pair of orthogonally-polarized filters that is placed over the flash and lens of the camera. Any reflections from the skin surface are eliminated through cross-polarization that improves the visibility of re-mitted light from the epidermis and dermis where melanin and hemoglobin lies.

Standard and UV photos measures wrinkles, surface spots, pores, texture, UV spots (sun damage), porphyrins (bacteria lodged in pores that might lead to acne) and red areas (acne, inflammation, spider veins). These measurements are then evaluated according to a statistical model over a broad scale of women (all ages) from across the globe. The statistical model provides the expected range for wrinkles, pores, texture and spots for the specific age and skin type analyzed.

The skin features mentioned above can be defined as the following:

Wrinkles – Appear as furrows, folds or creases in the skin and are characterized by a long, narrow shape. Exposure to the sun will increase their appearance whilst the elasticity of the skin will decrease.

Surface spots – These areas vary in size and can be recognized by their individual color and appear different from the background skin tone. Normally these areas are brown or red lesions that include freckles, any vascular lesions, scars or hyperpigmentation. Spots would be visible on the skin if one were to look at the skin without any make-up, the flawlessness of the skin.

Pores – Differ from spots as pores are much smaller than a spot. Pores are darker in color than the surrounding skin tone and are round surface openings of sweat gland ducts.

Texture – Smoothness of the skin that is measured by identifying the shift in color from the surrounding skin tone. This will be shown as peaks (yellow) and valleys (blue) on the skin surface.

UV Spots – Removing the epidermis, the sun damage would be visible under that layer of skin. Overtime this will move to the surface of the skin, showing up in scattered pigmentation. Sun damage occurs due to accumulation of melanin below the skin surface.

Porphyrins – Known as bacterial excretions that are lodged inside the pores and can overtime lead to acne. Even after thoroughly cleansing the skin, these bacteria remain in the pores. Identified as round white spots.

Red areas – The red color of these structures are due to the blood vessels and hemoglobin in the papillary dermis (sub-layer of skin). It represents a range of conditions like acne, inflammation, rosacea or spider veins.