



Radiance™ is a new technology debuting on the Epson Stylus® Photo R1900 that produces better photos. With advanced ink sets that use a larger color palette, such as the 8-ink Epson UltraChrome Hi-Gloss® 2 Ink featured on the R1900, optimizing output becomes more difficult. This is where **Radiance** comes in.

Radiance uses an advanced mathematical architecture to optimize the way ink colors are mixed, while simultaneously improving print quality in the following ways:

- Reduced grain
- Improved color constancy
- Dramatically smoother gradations



radiance™

Advanced Math for the Advanced Color Gamut

Reduced grain

What is one of the items a photographer values most in a photographic print? Grain so fine it is unnoticeable at close range, and that's one of the features **Radiance** delivers.

There's a common misconception that adding colors to an ink set will automatically reduce grain, when in fact, adding more colors actually makes it easier to introduce grain. Why? Because with more colors, there are exponentially more ink color combinations that can be used to create a specific color. And many of these ink combinations can actually introduce grain.

Radiance works by selecting optimized ink combinations that systematically reduce grain, assuring excellent color quality in skin tones and highlights.

Without **Radiance**



With **Radiance**



Although both photos above have a large color gamut, when viewed closely, there's a noticeable grain reduction in the photo printed with **Radiance**.



Improved color constancy

Oftentimes ink jet printers exhibit a phenomenon where colors appear to be different under different light sources. By optimizing specific ink combinations, **Radiance** delivers improved metameric matching, so colors look the same when viewed under different light sources.

Light Source A



Light Source B—Without **Radiance**



Without **Radiance**, colors may appear different under different light sources

Light Source A



Light Source B—With **Radiance**



Radiance delivers color constancy—lighting doesn't affect the color appearance

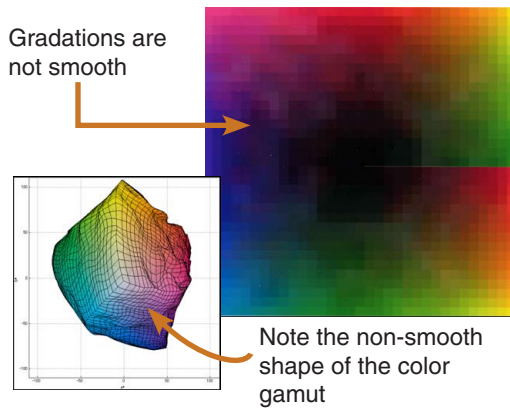
Color constancy is especially important to the professional photographer because it allows him/her to produce a more sellable print. With the improved color constancy delivered by **Radiance**, colors will more likely appear as intended regardless of the lighting used by the customer.



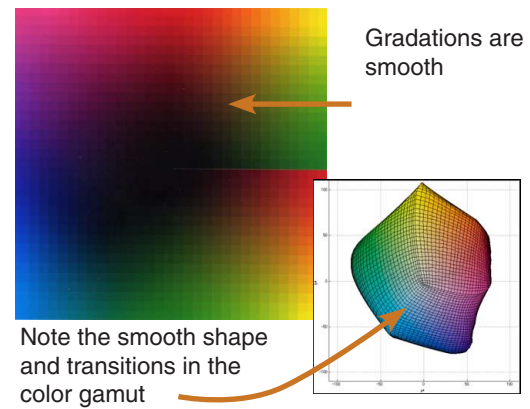
Optimized color gradation

Good gradation is demonstrated by a seamless change from one color to another, and is most noticeable in skin tones. It's also evident in the detail areas of highlights and shadows. Gradation is an element most professional photographers look for and is critical for producing a good print. **Radiance** selects ink combinations to produce smoother transitions between different colors, so photos will exhibit the detail and smoothness required by serious photographers.

Gradation without **Radiance**



Gradation with **Radiance**



Summary

Radiance optimizes color while ensuring Epson print quality, with:

- Grain reduction for excellent color quality in skin tones and highlights
- Improved color constancy under different lighting conditions
- Optimized color gradation for smoother transitions between colors