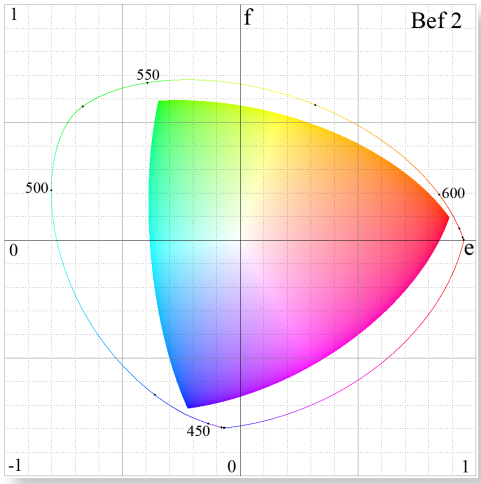
Beyond RGB™ Model

The foundation for future HDR Imaging Workflow

Positioned as the foundation for next-generation imaging in the 21st century, the Beyond RGB Color Model platform offers major advantages for the editing and compressing of digital imagery: High Definition, High Dynamic Range, Full Gamut, and High Precision. This provides the ultimate in no-compromise quality. Unified Color methodology solves many long-standing color science challenges and supports a unique imaging paradigm that offers powerful capabilities and new levels of efficiency.

Features and advantages

- Human vision, device-independent color model
- No restrictions on dynamic range or color range
- Objective (quantitative) quality control to achieve color accuracy at every stage of imaging workflow
- Superior image editing capability: never before seen, intuitive to use and powerful operations
- Unprecedented image compression that retains full quality (HDR, full gamut) with extreme ratios (2-3x lead)
- Takes traditional color management to a new level
- Developed on consistent physical principles



Device-independent color model based on human vision

As the ultimate processor of visual data, human vision is a natural and intuitive foundation for the new digital color model, describing information in terms of how it is seen rather than how it may be reproduced. Based on human vision and independent from any imaging hardware, the Beyond RGB provides full human color range, high dynamic range, and tunable precision directly tied to the properties of human vision.

Efficient, optimal, and capable

At the creation of the Beyond RGB Color Model the primary goals were to make it precise, efficient, capable, and easy to use. These were the requirements set for the development of the model from ground zero. In the final result the model delivers unique features and impressive advantages for image editing and image compression.

Unprecedented image editing and compression

The Beyond RGB Model provides the highest degree of separation between brightness and chromatic (color) components of the visual data. When the brightness or contrast of the image is adjusted, the colors remain intact. When the colors are adjusted, the brightness and contrast remain intact. This represents a new concept when users can manipulate natural image parameters, such as brightness, contrast, saturation independent from each other. Traditional color models do not separate brightness and chromaticity very well. As a result, image editing is non-intuitive and hard to master.

Another powerful feature of the Beyond RGB Color Model is its performance in HDR image compression. It achieves an impressive 2-3x lead over such HDR formats as Radiance HDR or OpenEXR, offering a compact and capable HDR image archiving solution that does not compromise on image quality.

The right model for new HDR hardware

Beyond RGB Color Model is an ideal base model for unprecedented image capture in HDR cameras. It delivers superior characteristics in noise, dynamic range, color accuracy, and precision.

Beyond RGB is an ideal foundation for future video and display technology standards, with its unprecedented compression rates and capabilities to deliver high-end quality to ever increasing user demands.