Color Grading

The Dolby Vision™ workflow is similar to the existing color-grading workflows for both cinema and home grades. The goal is to preserve more of what the original camera captured and limit creative trade-offs.

The Dolby Vision master is established on a Dolby Vision Mastering Monitor for the home grade and on the Dolby® Cinema Projector for the theatrical grade. Both devices are capable of high brightness levels and wide color gamut. The grade is created in the traditional fashion except that the imagery data is specified in PQ space (SMPTE ST 2084:2014), a perceptual space based on the human visual system.

For the home grade, the Dolby Vision capable color-grading system analyzes the master grade and saves the metadata that describes the creative decisions made on a Dolby Vision Mastering Monitor. The content is mapped to a Rec. 709 reference display at a standard brightness (100 nits) and the colorist performs the trim pass.

The output of the Dolby Vision grading workflow is image essence plus metadata, which feeds the Dolby Vision mastering tool that creates the mezzanine. The Dolby Vision encoder uses the mezzanine and generates the Dolby Vision codec. Dolby Vision consumer devices then map the content generated by this process to their best brightness and color gamut capabilities.