



Meters: Jeti Specbos 1211

GammaFormula: PowerFunction

GamutCoordinates:

Sources: AV Foundry VideoForge

WindowSize: Constant APL 18

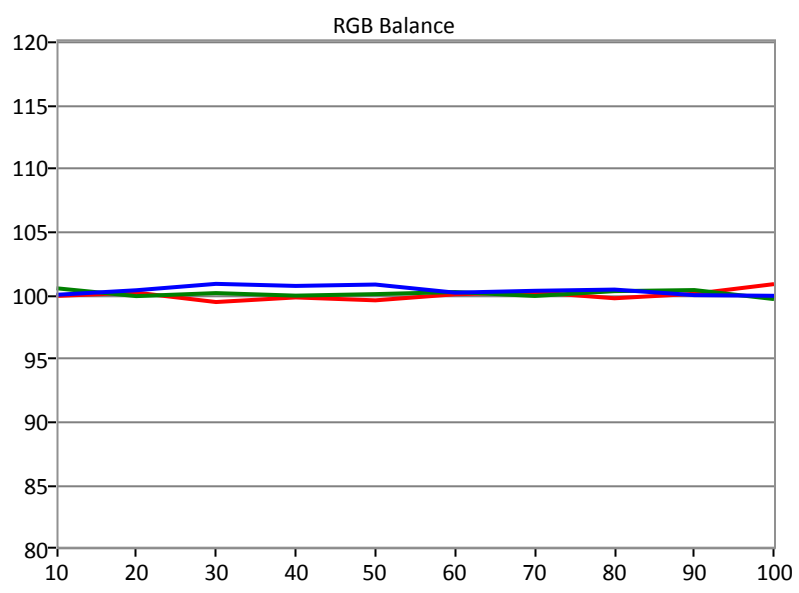
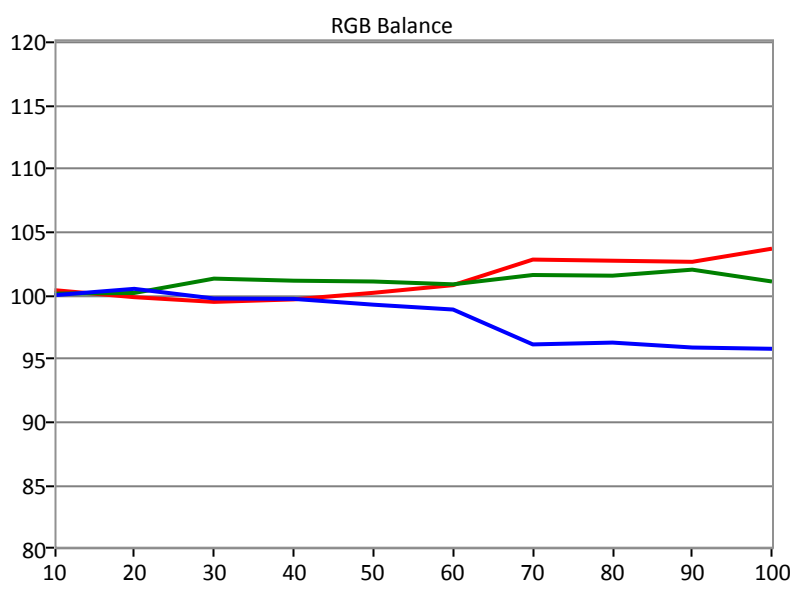
HDTV BY CHAD B.



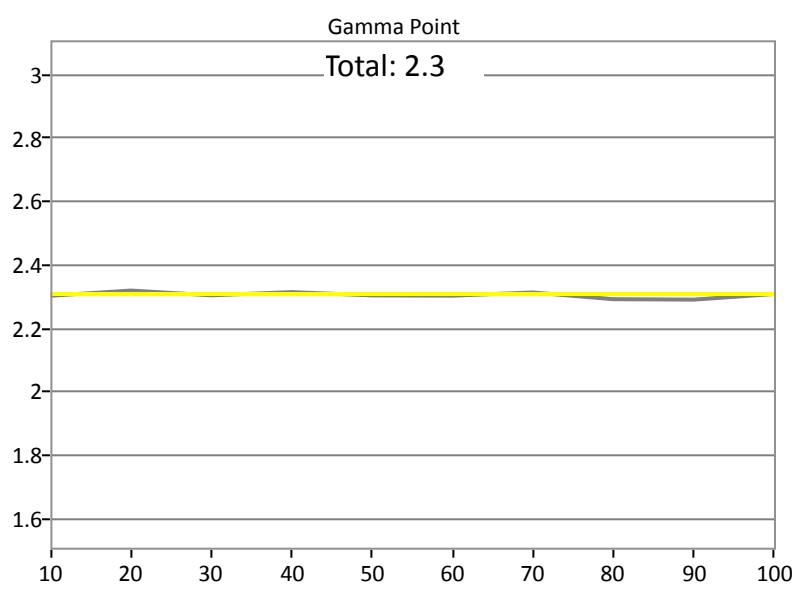
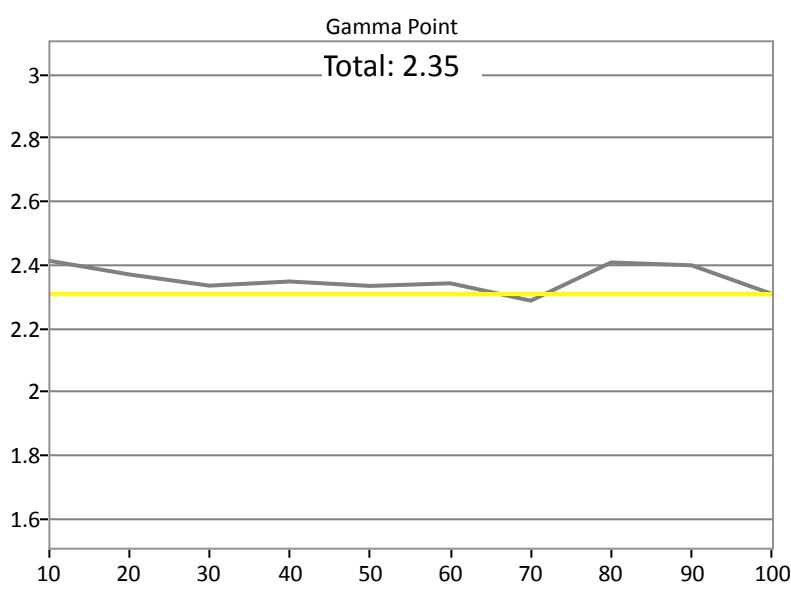
Before calibration:

After calibration:

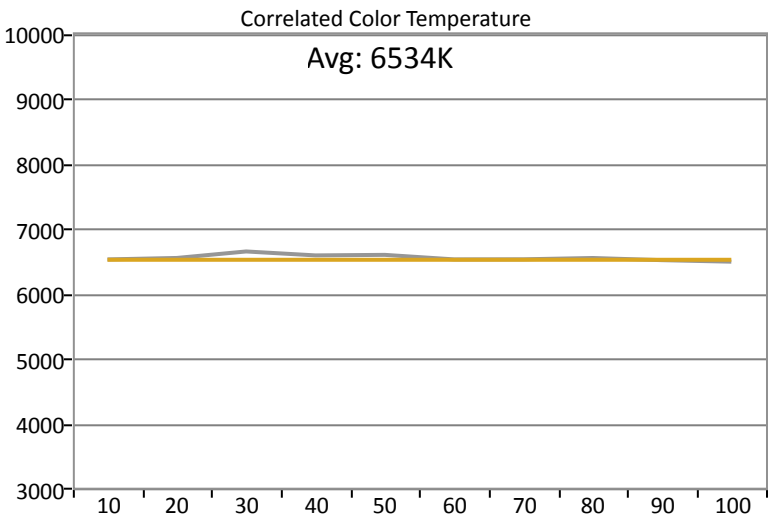
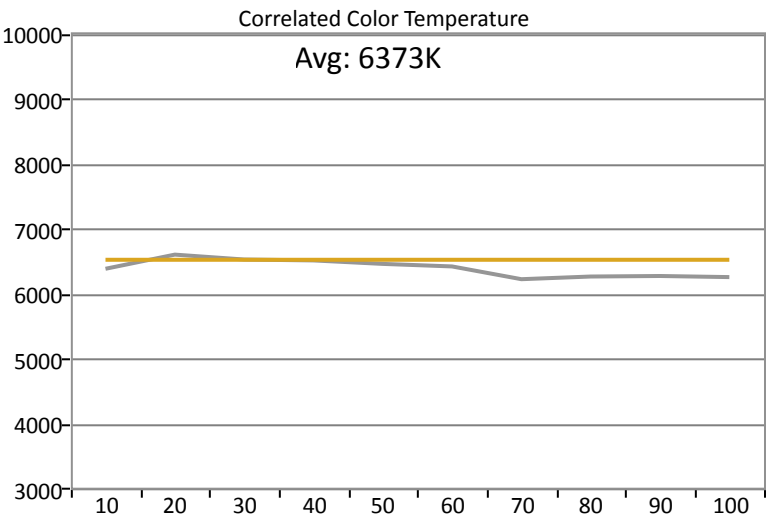
The RGB balance shows the ratio of red, green, and blue that make up the black and white foundation of the picture. It is also known as grayscale or white balance. If this foundation is skewed, no amount of tweaking the color and tint will fix the image. Ideally, the R, G, and B should be well balanced from dark (left) to bright (right).



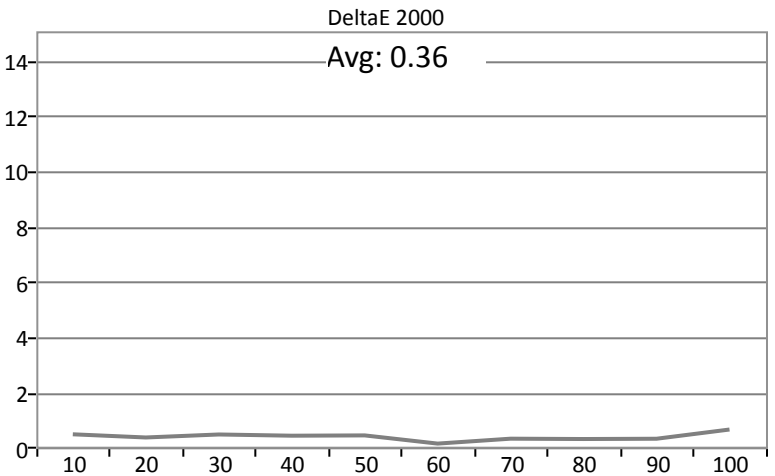
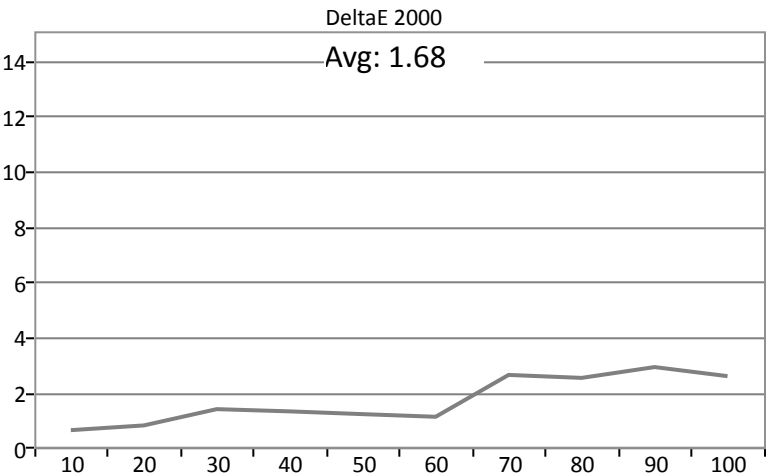
The point gamma graph shows the display's brightness ratio as it transitions from dark to bright images. If the gamma is too low, the picture may look washed out with a "caked on makeup" look on brightly lit faces. If it is too high, dark images will be too hard to see and the image will look too contrasty. A good gamma also helps improve the depth of the image.



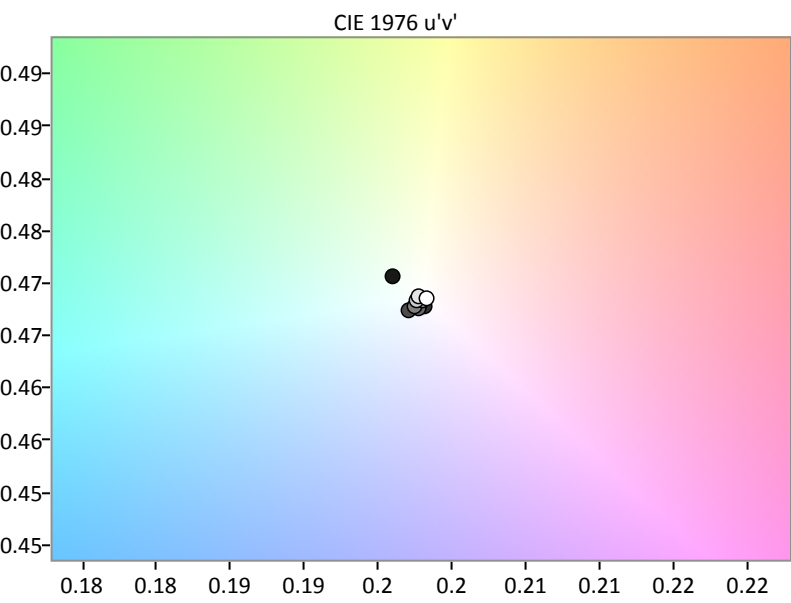
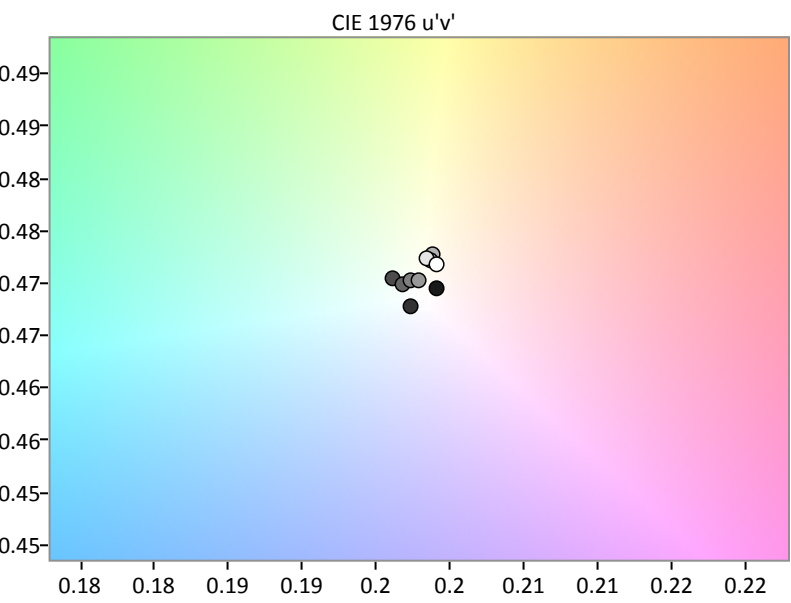
The color temperature is the color tone of the picture, from dark (left) to bright (right). Lower numbers will result in a rustic, earthy tone while higher numbers suggest a bluish, steel-gray look. The HDTV standard is 6504 degrees Kelvin.



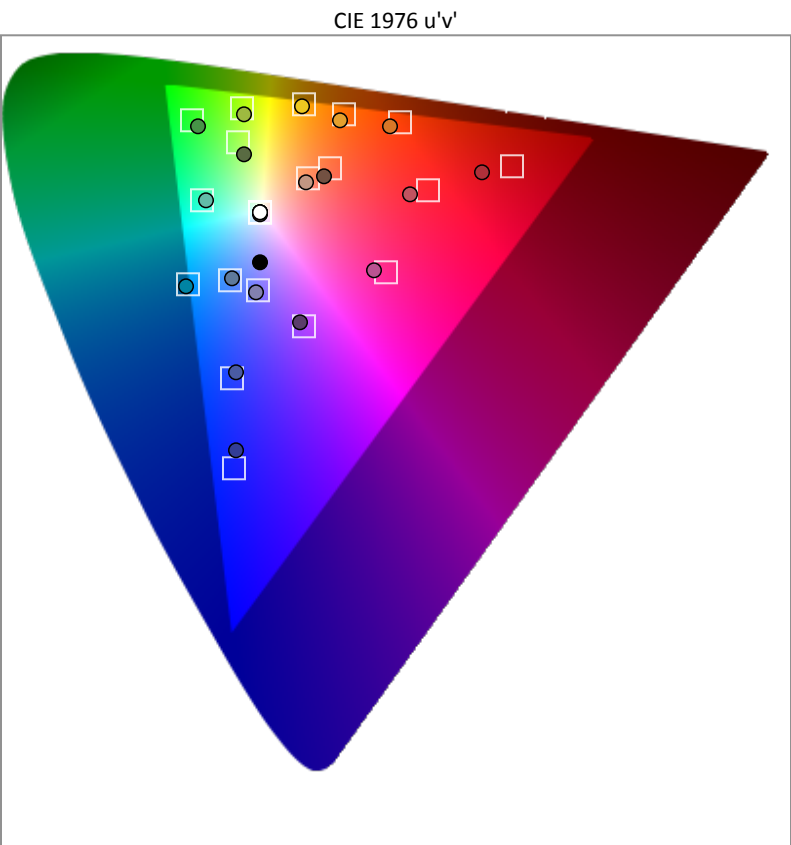
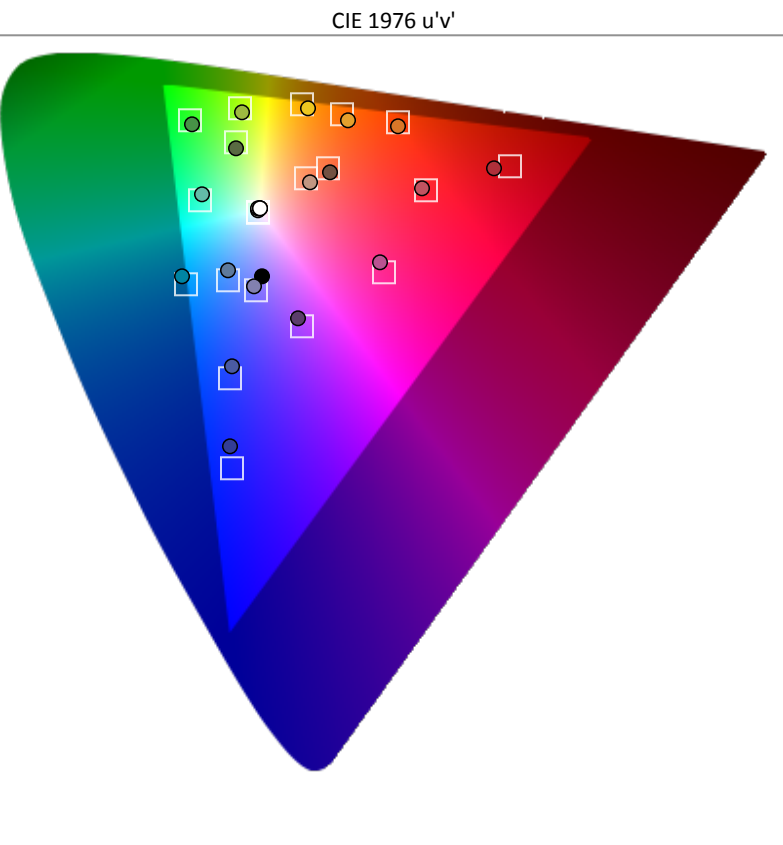
The grayscale DeltaE is a standardized measure of error based on the eye's sensitivity to color error. It shows how visibly serious the above errors are with real images, with lower numbers indicating better performance. Errors of less than 5 are generally thought to be acceptable, while errors less than 3 are generally thought to be imperceptible with normal program material.



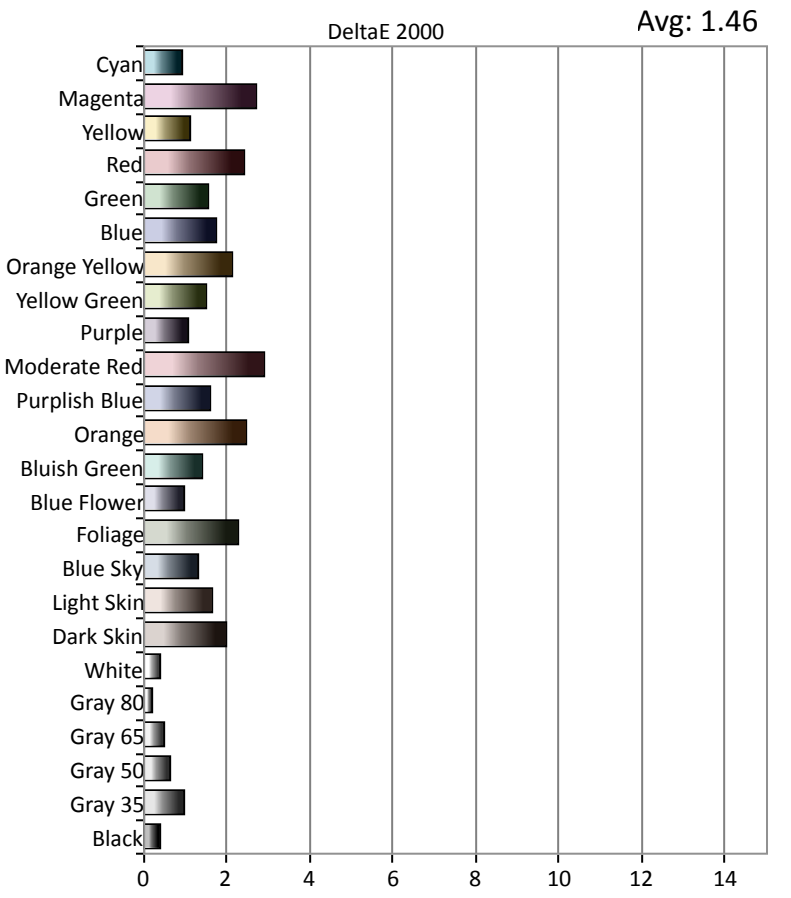
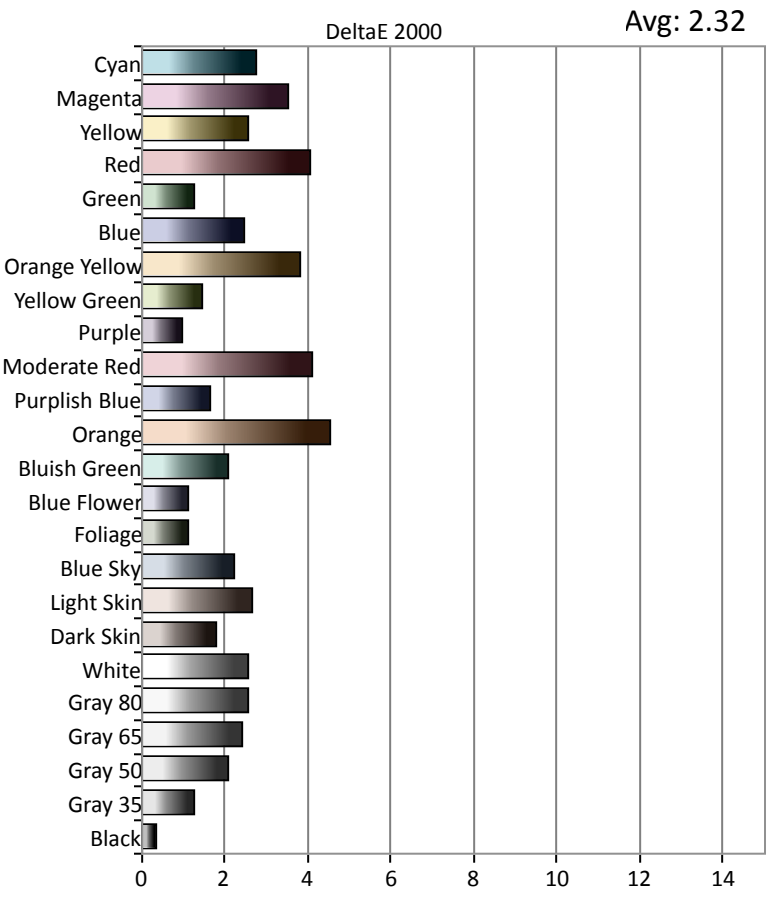
The grayscale scatter chart illustrates which direction the display's white balance gravitates toward at different brightness levels. Tight groups at the center target area indicate excellent performance. If the group cannot be in the target area, the next best thing is for it to be clustered along the black line, which is known as the Blackbody Curve.



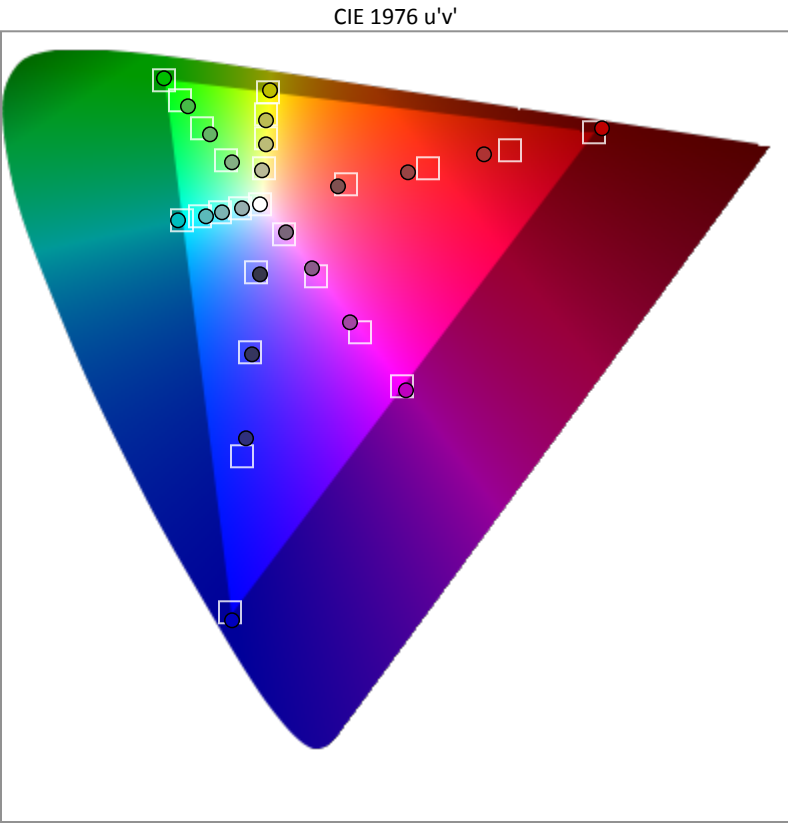
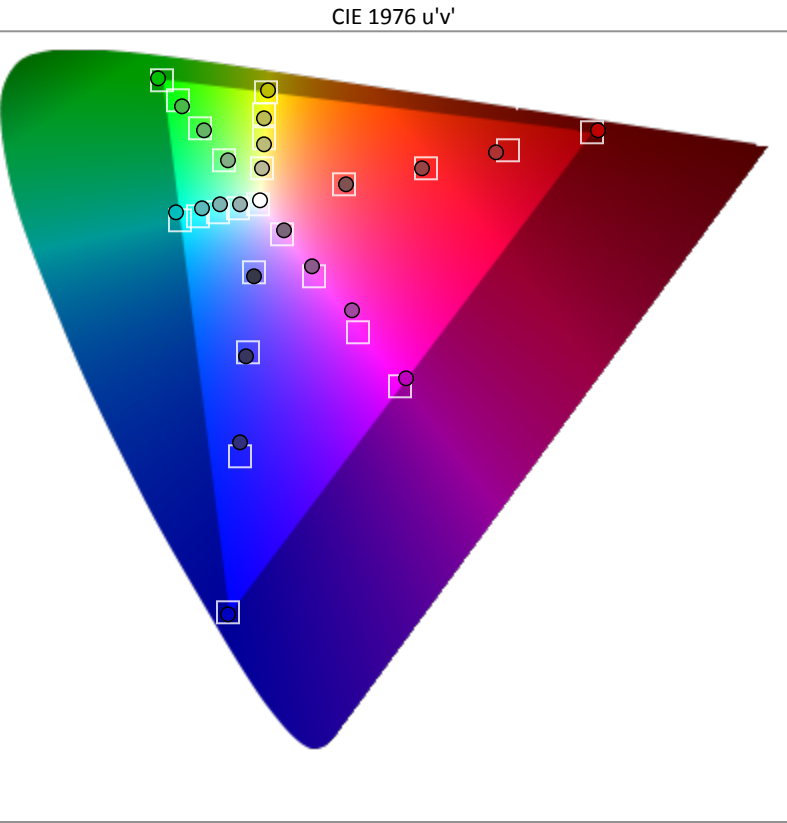
The Color Checker gamut chart includes spectral simulations of light and dark skin, grass, blue sky, and other easily recognizable objects occurring frequently in nature to get a quick but comprehensive idea of how accurately the display reproduces normal images. Tight matching of the measurement dots with their respective target boxes indicate accurate color reproduction.



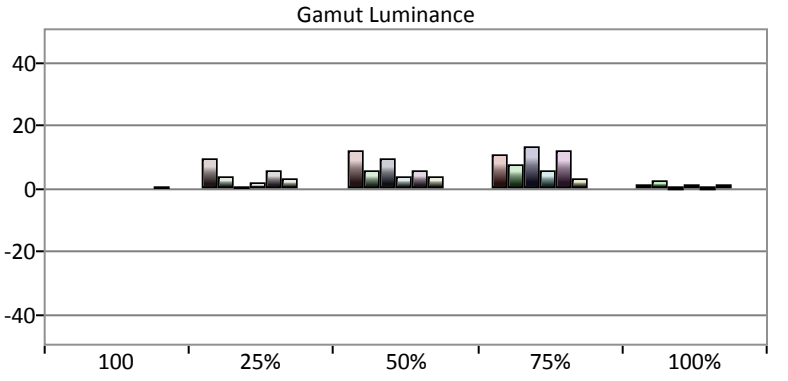
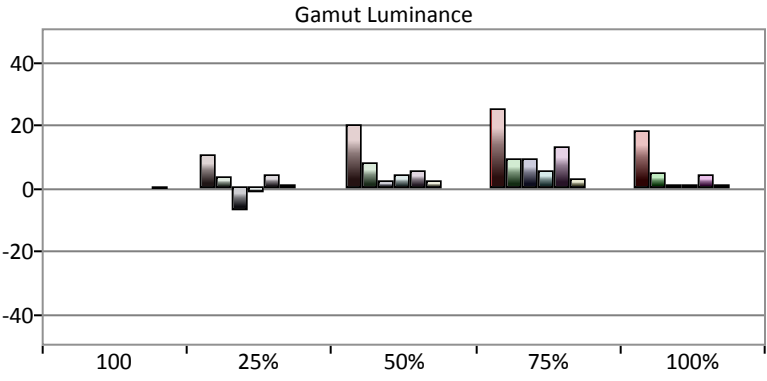
The Color Checker DeltaE shows how visible the overall error is at each point.



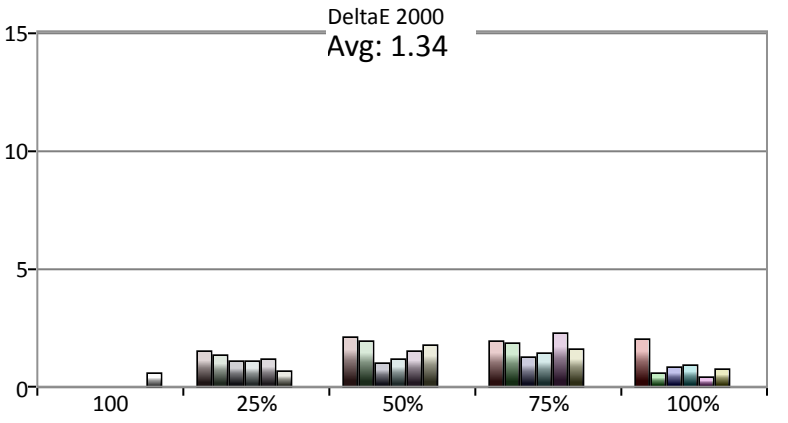
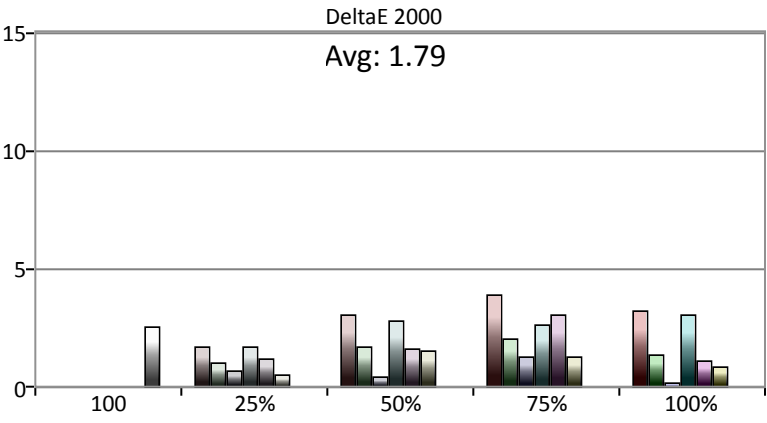
The gamut saturation CIE chart shows the consistency of the purity and hue of each color from very pale to fully colored. Tight alignment of the measurement dots in their respective target square indicates consistent color performance. These are typically measured at 75% level.



The Gamut Saturation Luminance shows if a particular color is pushed or de-emphasized. Tight groupings averaging around 0 indicate proper color intensities.



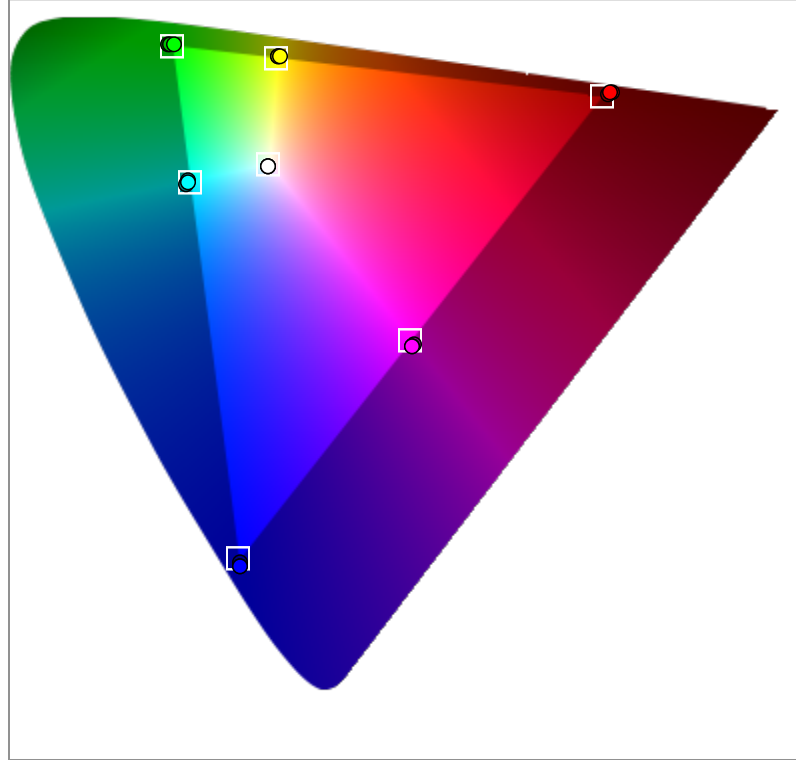
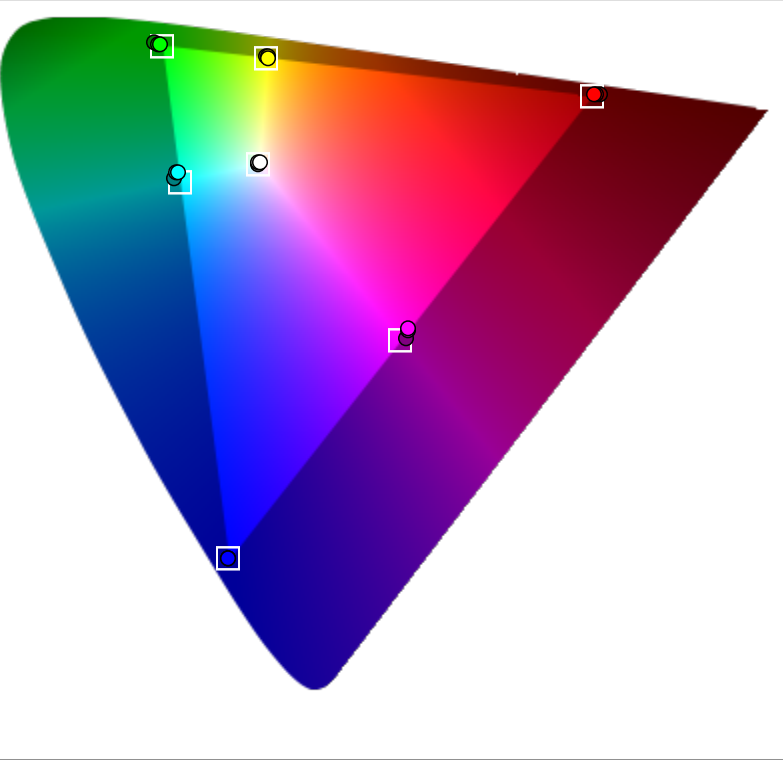
The gamut saturation DeltaE shows how visible the errors of each color are with real program material. While the first DeltaE chart was for white balance and gamma, this DeltaE chart shows the error for each primary and secondary color. It takes into account each color's amount of paleness or saturation and its intensity, or how much of that color is added to the image.



The gamut luminance illustrates how consistent each color's saturation is with intensity level. Tight grouping at each color's target area is desired.

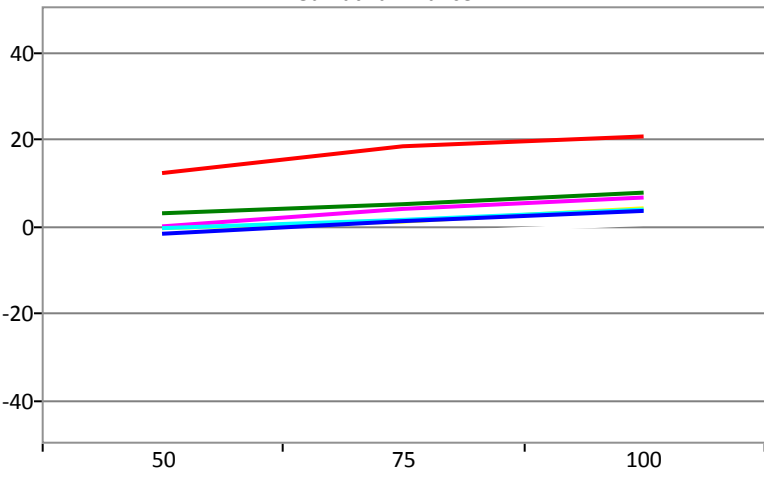
CIE 1976 u'v'

CIE 1976 u'v'

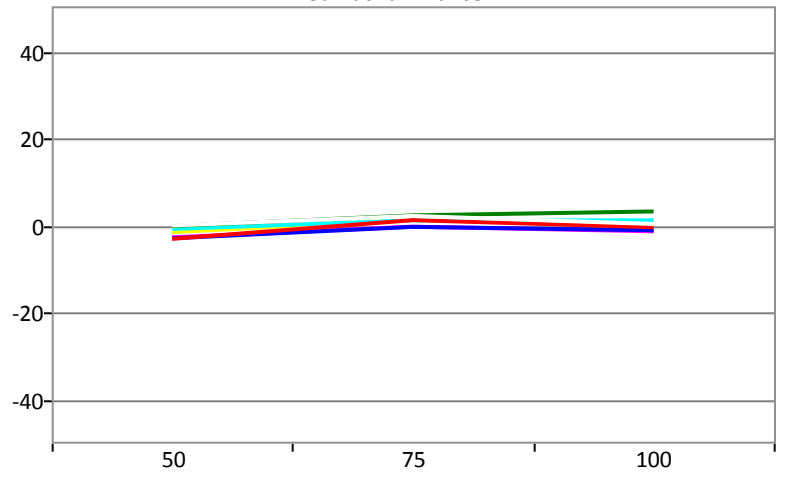


The gamut luminance shows if each fully saturated color is emphasized or de-emphasized at different brightness levels.

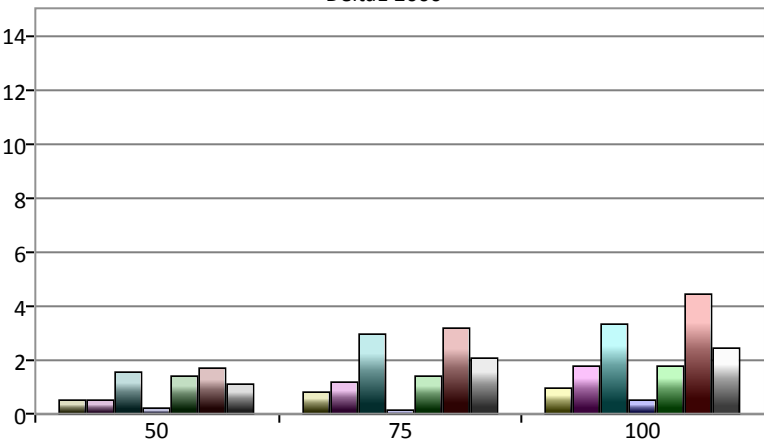
Gamut Luminance



Gamut Luminance



DeltaE 2000



DeltaE 2000

