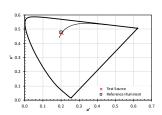
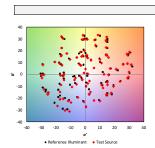


Chromaticity Comparison (CIE 1931)
The CIE 1931 Standard 2° Colorimetric Obsused for calculations.

Color Rendition by Hue-Angle Bin



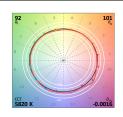
Chromaticity Comparison (CIE 1976)
The CIE 1931 Standard 2" Colorimetric Obs



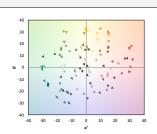
Shift in Hue-Chroma Plane
The (p, b) coordinates of CAM02-UCS are calculated for each of the 90 CSs under the test and reference conditions. R, on based on the average color difference of the 90 CSs in CAM02-UCS (bids including the 1 dimension). [Background is for visual orientation only]

## -10 -20 -30

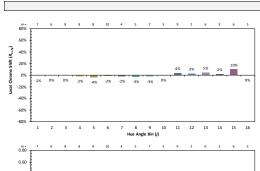
Hue-Angle Bin Average Coordinates
The average (a', b') coordinates of CAM02-UCS are calculated
for the CES within each of 16 hue-angle bins. R<sub>i</sub> is based on the
area of the polygons for the test and reference conditions. The
three types of "tocal" values are based on the difference in
coordinates for each hue-angle bin. [Background is for visual



Color Vector Graphic (CVG) shows a normalized version of the average change in (g', b') coordinates of CAMO2-UCS for the CES within each hux-angle bin. Alternative versions of the VGF are available in the UCG sheet. Elements of this Graphic can be turned on or off using the mean on the Main sheet (require recalculation). (Background is for visual orientation only)



Vector Shifts
Each of the 99 pairs of test and reference coordinates can be potent as a vector. This chart does not show the /f dimension, which is also included in color fidelity calculations. [Coloring is for visual orientation only]

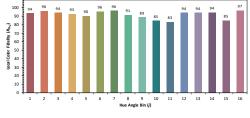


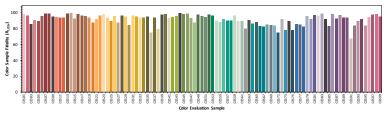
0.40 0.40 0.20 0.00 0.00 0.00 0.40 -0.60 7 8 9 10 11 12 13 14 15 16 Hue Angle Bin (/) -0.80 E

Local Hue Shift is deteremined from the average change perpendicular to the Local hue shift is deteremined from the average change perpendicular to the hue-angle bin for the color evaluation samples within each hue-angle bin. The number of samples per bin (m), which can vary based on the CCT used for the calculation, is shown at the top. [The colors of the bars are for visual orientation only.]



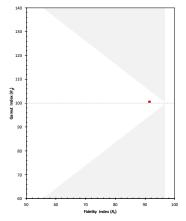
Local Color Fidelity
Local Color Fidelity is the average difference in CAM02-UCS for the
color evaluation samples in each hue-angle bin. The number of
samples per bin, which can vary based on the CCT used for the
calculation, is shown at the top. [The colors of the bars are for visus
orientation only.]



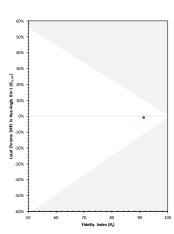




Ref Test



**Gamut Index vs. Fidelity Index**The range in possible  $R_{\rm c}$  values increases as  $R_{\rm c}$  decreases. The gray shaded area indicates the approximate region of combinations that are not possible for nominally white light sources.



Local Chroma Shift in Hue-Angle Bin 1 vs. Fidelity Index The range in possible  $R_{\rm Shift}$  values increases as  $R_{\rm f}$  decreases. I shaded area indicates the approximate region of combination not possible for nominally white light sources.