

# VOC Based End-Point Criteria for Lightfastness of Hardcopy Prints

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## **Abstract**

Historically printlife of hardcopy output prints has been based on endpoint criteria relative to changes in density (loss of density). In the past few years attempts have been made to establish acceptable colorimetric endpoints. These metrics have been based on Delta E or some variation of delta E. This presentation will discuss a psychophysical study conducted to determine objective metrics in a perceptually uniform color space. The study will also look at the capability of existing metrics to determine their validity. Primary and Secondary color tonescales as well as neutrals and memory colors (flesh, sky, foliage, and others) were used to identify tolerances around variations of these

colors. Subjective response to 16 scenes from 12 output systems at various degrees of degradation were correlated to objective metrics determined using CIE2000 color difference formulae.

## **Biography**

**David Oldfield** is employed at Eastman Kodak's Inkjet Systems and Materials Division as a development engineer. In his 20 years at Kodak he has worked with color negative, thermal dye transfer, and inkjet technologies. Dave's principal areas of interest are image quality, color quality, and test development. He has a B.S. in Imaging Science from R.I.T.