

Analysis of Observations Acquired from Digieye and Macbeth

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Abstract—The aim of this paper was to indicate the compatibility of results obtained from two kinds of equipment: Macbeth and DigiEye. To accomplish this, the selected materials were tested on both devices. DigiEye is a computer controlled digital camera used to measure the colour changes caused by special fabric treatment. The data that can be obtained is the reflectance or colourimetric results. The operating principle of Macbeth spectrophotometer is based on the quantitative measurement of transmission and reflection of the light by the sample. Macbeth has been used to test not only the textile materials but also for other solids and liquids since the middle of the twentieth century. Colour measurement in the CIELab system and comparison of results from both DigiEye and Macbeth will indicate the differences or correlation between these two devices. The analysis of results will help to determine if the DigiEye measurements can be fully comparable to those got from the spectrophotometer.

Keywords —DigiEye, Macbeth, CIELab, measurement of color.