

1.4. Color-difference formulas

Evaluation of the Color Rendering Properties of Light Sources

Homework exercise 1.4.1.

In the Munsell Book of Color, compute the distance of each chip to the nearest neighbor in: CIELAB, CIE94 and CIEDE2000.

- a) Discuss if these color difference formulae agree with visual perception, supposing that Munsell is homogeneous (equal perceived color difference between nearest neighbors).
- b) Do the different formulae always have the same nearest neighbor?

Note: In attached file you can find 1269 reflectances of Munsell's chips, measured at 61 different wavelengths (from 400 to 700 nm at each 5 nm). You can see attached D65 spd and cmf too.