

CIELAB 1976 $L^*a^*b^*$ -color space and CIEBasedABC-transformation

$$X = X_n \left[(L^* + 16) / 116 + a^*/500 \right]^3$$

$$Y = Y_n \left[(L^* + 16) / 116 \right]^3$$

$$Z = Z_n \left[(L^* + 16) / 116 - b^*/200 \right]^3$$

$$A = \text{Decode}L^* = \{16 \text{ add } 116 \text{ div}\}$$

$$B = \text{Decode}a^* = \{500 \text{ div}\}$$

$$C = \text{Decode}b^* = \{200 \text{ div}\}$$