

sensation scaling functions

lightness L^* and tristimulus value Y

adaptation on surround white W

$$L^*_W = 100 (Y / 100)^{1/2,0}$$

adaptation on surround grey U

$$L^*_U = 100 (Y / 100)^{1/2,4}$$

description with CIELAB 1976

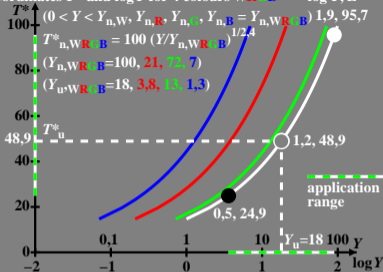
$$L^*_{\text{CIELAB}} = 116 (Y / 100)^{1/3,0} - 16$$

adaptation on surround black N

$$L^*_N = 100 (Y / 100)^{1/3,0}$$

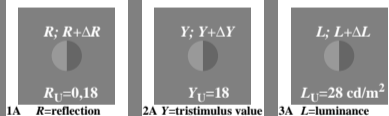
ecc00-1a, eea00-4a, CEA10-4N

IECsRGB-triangle lightness T^* as function of $\log Y$
coordinates T^* and $\log Y$ for 4 colours $WRUB$ $\log Y, L^*$

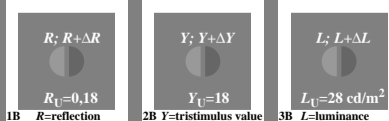


ecc00-2a, eer31-4n

Viewing situations of adjacent greys



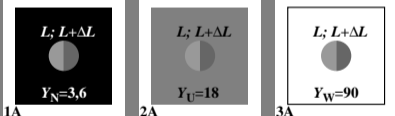
Viewing situations of separated greys



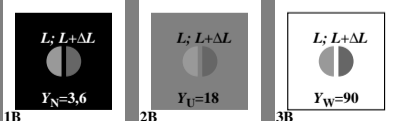
ecc00-3a, eea00-2n, CEA10-2N

ecc00-3n

Viewing situations of adjacent greys



Viewing situations of separated greys



ecc00-4a, eea00-3n, CEA10-3N