

$XYZ_w=95.0443, 100.0, 108.89$

$a^* = 500 (a' - a'_n) Y^{1/3}$

$b^* = 500 (b' - b'_n) Y^{1/3}$

$a' = a_2 [x/y]^{1/3}$

$b' = b_2 [z/y]^{1/3}$

$a_2 = [1/X_{D65}]^{1/3} = 0.2191$

$b_2 = -[1/Z_{D65}]^{1/3} = -0.08376$

$n = D65$

CIELAB D65

Name and spectral range

R_m 561_770 Y_m 520_770

G_m 475_573 C_m 380_561

B_m 380_520 M_m 573_475

Optimal colours (o), $Y_w=100$

6 of maximum (m) chroma for D65

in chroma diagram (a^*_{D65}, b^*_{D65})

