

$$Y_n := 255$$

$$i := 0..100$$

$$j := 0..255$$

$$L_{S_i} := i$$

$$L_{N_j} := j$$

$$Y_1(L_S) := \left(\frac{(L_S + 16)}{116} \right)^3 \cdot Y_n$$

$$Y_2(L_S) := \left(\frac{\left(\frac{L_S}{2.55} + 16 \right)}{116} \right)^3 \cdot Y_n$$

$$L_s := 50$$

$$L_n := \frac{255 \cdot L_s}{100} = 127.5$$

$$Y_1(L_s) = 46.968$$

$$Y_2(L_n) = 46.968$$

