

L^* central-field lightness

$$L^* = V (L_s/s)^n [(1-s+s L/L_s)^n - 1] \quad [1]$$

$$n = -0,25 \quad [2]$$

$$V = 1/(0,036 n L_u^{-0,30}) \quad [3]$$

$$L_s = 0,025 L_u^{0,705} \quad [4]$$

$$s = 1/[1+(n V L_s^n)^{1/(1-n)}] \quad [5]$$

$$L_u = 0,1; 1; 10; 100; 1000 \text{ cd/m}^2 \quad [6]$$

$$dL = [1/n V] [(L_s/s)^{1-n} - 1] [(1-s+s L/L_s)^{1-n}] \quad [7]$$

L^* central-field lightness
surround-field luminance
 L_u / [cd/m²]

L_u / [cd/m²]

12.62
0,1

21.89
1

36.02
10

56.64
100

85.66
1000

$$L^* = V (L_s/s)^n [(1-s(L-L_s)/L_s)^n - 1] \quad [8]$$

$$dL = [1/n V] [(L_s/s)^{1-n} - 1] [(1-s(L-L_s)/L_s)^{1-n}] \quad [9]$$

central-field luminance L / [cd/m²]

0,001 0,01 0,1 1 10 100 1000 10000

-3 -2 -1 0 1 2 3 4

→ log L / [cd/m²]