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Relationship brightness P_{T1} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_A=1000\text{cd/m}^2$

$$B_{T1}(L_T, L_A, \varphi) = C_T(\rho) L_T^2 - B_{T1}(L_A, \varphi) \quad \text{brightness } P_{T1} [1]$$

$$B_{T1}(L_A, \varphi) = C_T(\rho)(S(\rho) + S_T(\rho)L_A^2) \quad (n=0,31) \quad [2]$$

$$L_T(L_A, \varphi) = (C_T(\rho) + S_T(\rho)L_A^2)^{1/2} \quad \text{(t-black threshold)} [3]$$

$$L_T \quad \varphi \quad C_T(\rho) \quad S_T(\rho) \quad S(\rho) \quad B_{T1}(L_A, \varphi) \quad B_{T1} \quad L_{T1} \quad L_{A1} \quad L_{T2} \quad L_{A2}$$

2782	120	22.969	0.0718	0.2448	49.51	218.98	11.91	83.94			
1736	120	22.969	0.0718	0.2448	49.51	182.48	11.91	83.94			
1000	120	22.969	0.0718	0.2448	49.51	145.98	11.91	83.94			
513	120	22.969	0.0718	0.2448	49.51	109.49	11.91	83.94			
221	120	22.969	0.0718	0.2448	49.51	72.99	11.91	83.94			
70	120	22.969	0.0718	0.2448	49.51	36.49	11.91	83.94			
11.91	120	22.969	0.0718	0.2448	49.51	0.00	11.91	83.94			
221	120	22.969	0.0718	0.2448	50.82	72.99	11.91	83.94			

Relationship brightness P_{T1} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_A=1000\text{cd/m}^2$

$$B_{T1}(L_T, L_A, \varphi) = s_T(\rho) L_T^2 - d_{T1}(L_A, \varphi) \quad \text{brightness } P_{T1} [1]$$

$$B_{T1}(L_A, \varphi) = C_T(\rho)(S(\rho) + S_T(\rho)L_A^2) \quad (n=0,31) \quad [2]$$

$$s_T(\rho) = C_T(\rho) [3] \quad d_{T1}(L_A, \varphi) = B_{T1}(L_A, \varphi) [4] \quad \text{(scaling factor)}$$

$$L_T \quad \varphi \quad C_T(\rho) \quad S_T(\rho) \quad S(\rho) \quad B_{T1}(L_A, \varphi) \quad B_{T1} \quad L_{T1} \quad L_{A1} \quad L_{T2} \quad L_{A2}$$

2782	120	22.969	0.0718	0.2448	49.51	218.98	22.969	49.51			
1736	120	22.969	0.0718	0.2448	49.51	182.48	22.969	49.51			
1000	120	22.969	0.0718	0.2448	49.51	145.98	22.969	49.51			
513	120	22.969	0.0718	0.2448	49.51	109.49	22.969	49.51			
221	120	22.969	0.0718	0.2448	49.51	72.99	22.969	49.51			
70	120	22.969	0.0718	0.2448	49.51	36.49	22.969	49.51			
11.91	120	22.969	0.0718	0.2448	49.51	0.00	22.969	49.51			
221	120	22.969	0.0718	0.2448	50.82	72.99	22.969	49.51			

Relationship brightness P_{T1} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_A=40\text{cd/m}^2$

$$B_{T1}(L_T, L_A, \varphi) = C_T(\rho) L_T^2 - B_{T1}(L_A, \varphi) \quad \text{brightness } P_{T1} [1]$$

$$B_{T1}(L_A, \varphi) = C_T(\rho)(S(\rho) + S_T(\rho)L_A^2) \quad (n=0,31) \quad [2]$$

$$L_T(L_A, \varphi) = (C_T(\rho) + S_T(\rho)L_A^2)^{1/2} \quad \text{(t-black threshold)} [3]$$

$$L_T \quad \varphi \quad C_T(\rho) \quad S_T(\rho) \quad S(\rho) \quad B_{T1}(L_A, \varphi) \quad B_{T1} \quad L_{T1} \quad L_{A1} \quad L_{T2} \quad L_{A2}$$

109	120	22.969	0.0718	0.2448	19.29	79.16	0.56	70.18			
68	120	22.969	0.0718	0.2448	19.29	65.56	0.56	70.18			
39	120	22.969	0.0718	0.2448	19.29	52.77	0.56	70.18			
20	120	22.969	0.0718	0.2448	19.29	39.58	0.56	70.18			
9	120	22.969	0.0718	0.2448	19.29	26.38	0.56	70.18			
3	120	22.969	0.0718	0.2448	19.29	13.19	0.56	70.18			
0.56	120	22.969	0.0718	0.2448	19.29	0.00	0.56	70.18			
9	120	22.969	0.0718	0.2448	19.83	26.38	0.56	70.18			

Relationship brightness P_{T1} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_A=40\text{cd/m}^2$

$$B_{T1}(L_T, L_A, \varphi) = s_T(\rho) L_T^2 - d_{T1}(L_A, \varphi) \quad \text{brightness } P_{T1} [1]$$

$$B_{T1}(L_A, \varphi) = C_T(\rho)(S(\rho) + S_T(\rho)L_A^2) \quad (n=0,31) \quad [2]$$

$$s_T(\rho) = C_T(\rho) [3] \quad d_{T1}(L_A, \varphi) = B_{T1}(L_A, \varphi) [4] \quad \text{(scaling factor)}$$

$$L_T \quad \varphi \quad C_T(\rho) \quad S_T(\rho) \quad S(\rho) \quad B_{T1}(L_A, \varphi) \quad B_{T1} \quad L_{T1} \quad L_{A1} \quad L_{T2} \quad L_{A2}$$

109	120	22.969	0.0718	0.2448	19.29	79.16	22.969	49.51			
68	120	22.969	0.0718	0.2448	19.29	65.57	22.969	49.51			
39	120	22.969	0.0718	0.2448	19.29	52.77	22.969	49.51			
20	120	22.969	0.0718	0.2448	19.29	39.58	22.969	49.51			
9	120	22.969	0.0718	0.2448	19.29	26.38	22.969	49.51			
3	120	22.969	0.0718	0.2448	19.29	13.19	22.969	49.51			
0.56	120	22.969	0.0718	0.2448	19.29	0.00	22.969	49.51			
9	120	22.969	0.0718	0.2448	19.83	26.38	22.969	49.51			

Relationship brightness P_{T2} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_A=1000\text{cd/m}^2$

$$B_{T2}(L_T, L_A, \varphi) = [C_T(\rho) L_T^2 - B_{T2}(L_A, \varphi)] P_{T2} \quad \text{brightness } P_{T2} [1]$$

$$B_{T2}(L_A, \varphi) = C_T(\rho)(S(\rho) + S_T(\rho)L_A^2) \quad (n=0,31, P_{T2}=1/P_{T1}) [2]$$

$$L_T(L_A, \varphi) = [S(\rho) + S_T(\rho)L_A^2]^{1/2} P_{T2} \quad \text{(t-black threshold)} [3]$$

$$Y_T \quad \varphi \quad C_T(\rho) \quad S_T(\rho) \quad S(\rho) \quad B_{T2}(L_A, \varphi) \quad B_{T2} \quad L_{T1} \quad L_{A1} \quad L_{T2} \quad L_{A2}$$

1906	120	22.969	0.0718	0.2448	34.60	149.99	8.15	83.94			
1189	120	22.969	0.0718	0.2448	34.60	124.99	8.15	83.94			
684	120	22.969	0.0718	0.2448	34.60	99.99	8.15	83.94			
351	120	22.969	0.0718	0.2448	34.60	74.99	8.15	83.94			
155	120	22.969	0.0718	0.2448	34.60	49.99	8.15	83.94			
48	120	22.969	0.0718	0.2448	34.60	24.99	8.15	83.94			
11.91	120	22.969	0.0718	0.2448	34.60	0.00	8.15	83.94			
155	120	22.969	0.0718	0.2448	35.53	49.99	8.15	83.94			

Relationship brightness P_{T2} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_A=1000\text{cd/m}^2$

$$B_{T2}(L_T, L_A, \varphi) = s_T(\rho) L_T^2 - d_{T2}(L_A, \varphi) \quad \text{brightness } P_{T2} [1]$$

$$B_{T2}(L_A, \varphi) = C_T(\rho)(S(\rho) + S_T(\rho)L_A^2) \quad (n=0,31, P_{T2}=1/P_{T1}) [2]$$

$$s_T(\rho) = C_T(\rho) [3] \quad d_{T2}(L_A, \varphi) = B_{T2}(L_A, \varphi) [4] \quad \text{(scaling factor)}$$

$$Y_T \quad \varphi \quad C_T(\rho) \quad S_T(\rho) \quad S(\rho) \quad B_{T2}(L_A, \varphi) \quad B_{T2} \quad L_{T1} \quad L_{A1} \quad L_{T2} \quad L_{A2}$$

1906	120	22.969	0.0718	0.2448	34.60	149.99	8.15	83.94			
1189	120	22.969	0.0718	0.2448	34.60	124.99	8.15	83.94			
684	120	22.969	0.0718	0.2448	34.60	99.99	8.15	83.94			
351	120	22.969	0.0718	0.2448	34.60	74.99	8.15	83.94			
155	120	22.969	0.0718	0.2448	34.60	49.99	8.15	83.94			
48	120	22.969	0.0718	0.2448	34.60	24.99	8.15	83.94			
11.91	120	22.969	0.0718	0.2448	34.60	0.00	8.15	83.94			
155	120	22.969	0.0718	0.2448	35.53	49.99	8.15	83.94			

Relationship brightness P_{T2} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_A=40\text{cd/m}^2$

$$B_{T2}(L_T, L_A, \varphi) = [C_T(\rho) L_T^2 - B_{T2}(L_A, \varphi)] P_{T2} \quad \text{brightness } P_{T2} [1]$$

$$B_{T2}(L_A, \varphi) = C_T(\rho)(S(\rho) + S_T(\rho)L_A^2) \quad (n=0,31, P_{T2}=1/P_{T1}) [2]$$

$$L_T(L_A, \varphi) = [S(\rho) + S_T(\rho)L_A^2]^{1/2} P_{T2} \quad \text{(t-black threshold)} [3]$$

$$Y_T \quad \varphi \quad C_T(\rho) \quad S_T(\rho) \quad S(\rho) \quad B_{T2}(L_A, \varphi) \quad B_{T2} \quad L_{T1} \quad L_{A1} \quad L_{T2} \quad L_{A2}$$

207	120	22.969	0.0718	0.2448	34.60	149.99	1.07	70.18			
130	120	22.969	0.0718	0.2448	34.60	124.99	1.07	70.18			
75	120	22.969	0.0718	0.2448	34.60	99.99	1.07	70.18			
39	120	22.969	0.0718	0.2448	34.60	74.99	1.07	70.18			
17	120	22.969	0.0718	0.2448	34.60	49.99	1.07	70.18			
5	120	22.969	0.0718	0.2448	34.60	24.99	1.07	70.18			
0.56	120	22.969	0.0718	0.2448	34.60	0.00	1.07	70.18			
17	120	22.969	0.0718	0.2448	35.53	49.99	1.07	70.18			

Relationship brightness P_{T2} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_A=40\text{cd/m}^2$

$$B_{T2}(L_T, L_A, \varphi) = s_T(\rho) L_T^2 - d_{T2}(L_A, \varphi) \quad \text{brightness } P_{T2} [1]$$

$$B_{T2}(L_A, \varphi) = C_T(\rho)(S(\rho) + S_T(\rho)L_A^2) \quad (n=0,31, P_{T2}=1/P_{T1}) [2]$$

$$s_T(\rho) = C_T(\rho) [3] \quad d_{T2}(L_A, \varphi) = B_{T2}(L_A, \varphi) [4] \quad \text{(scaling factor)}$$

$$Y_T \quad \varphi \quad C_T(\rho) \quad S_T(\rho) \quad S(\rho) \quad B_{T2}(L_A, \varphi) \quad B_{T2} \quad L_{T1} \quad L_{A1} \quad L_{T2} \quad L_{A2}$$

207	120	22.969	0.0718	0.2448	34.60	149.99	1.07	70.18			
130	120	22.969	0.0718	0.2448	34.60	124.99	1.07	70.18			
75	120	22.969	0.0718	0.2448	34.60	99.99	1.07	70.18			
39	120	22.969	0.0718	0.2448	34.60	74.99	1.07	70.18			
17	120	22.969	0.0718	0.2448	34.60	49.99	1.07	70.18			
5	120	22.969	0.0718	0.2448	34.60	24.99	1.07	70.18			
0.56	120	22.969	0.0718	0.2448	34.60	0.00	1.07	70.18			
17	120	22.969	0.0718	0.2448	35.53	49.99	1.07	70.18			

Relationship brightness P_{T1} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_A=200\text{cd/m}^2$

$$B_{T1}(L_T, L_A, \varphi) = C_T(\rho) L_T^2 - B_{T1}(L_A, \varphi) \quad \text{brightness } P_{T1} [1]$$

$$B_{T1}(L_A, \varphi) = C_T(\rho)(S(\rho) + S_T(\rho)L_A^2) \quad (n=0,31) \quad [2]$$

$$L_T(L_A, \varphi) = (C_T(\rho) + S_T(\rho)L_A^2)^{1/2} \quad \text{(t-black threshold)} [3]$$

$$L_T \quad \varphi \quad C_T(\rho) \quad S_T(\rho) \quad S(\rho) \quad B_{T1}(L_A, \varphi) \quad B_{T1} \quad L_{T1} \quad L_{A1} \quad L_{T2} \quad L_{A2}$$

109	120	22.969	0.0718	0.2448	30.71	65.99	2.55	78.36			
68	120	22.969	0.0718	0.2448	30.71	55.99	2.55	78.36			
346	120	22.969	0.0718	0.2448	30.71	45.99	2.55	78.36			
200	120	22.969	0.0718	0.2448	30.71	35.99	2.55	78.36			
103	120	22.969	0.0718	0.2448	30.71	25.99	2.55	78.36			
44	120	22.969	0.0718	0.2448	30.71	15.99	2.55	78.36			
14	120	22.969	0.0718	0.2448	30.71	5.99	2.55	78.36			
2.55	120	22.969	0.0718	0.2448	30.71	0.00	2.55	78.36			
44	120	22.969	0.0718	0.2448	31.54	45.99	2.55	78.36			

Relationship brightness P_{T1} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_A=200\text{cd/m}^2$

$$B_{T1}(L_T, L_A, \varphi) = s_T(\rho) L_T^2 - d_{T1}(L_A, \varphi) \quad \text{brightness } P_{T1} [1]$$

$$B_{T1}(L_A, \varphi) = C_T(\rho)(S(\rho) + S_T(\rho)L_A^2) \quad (n=0,31) \quad [2]$$

$$s_T(\rho) = C_T(\rho) [3] \quad d_{T1}(L_A, \varphi) = B_{T1}(L_A, \varphi) [4] \quad \text{(scaling factor)}$$

$$L_T \quad \varphi \quad C_T(\rho) \quad S_T(\rho) \quad S(\rho) \quad B_{T1}(L_A, \varphi) \quad B_{T1} \quad L_{T1} \quad L_{A1} \quad L_{T2} \quad L_{A2}$$

109	120	22.969	0.0718	0.2448	30.71	65.99	2.55	78.36			
68	120	22.969	0.0718	0.2448	30.71	55.99	2.55	78.36			
346	120	22.969	0.0718	0.2448	30.71	45.99	2.55	78.36			
200	120	22.969	0.0718	0.2448	30.71	35.99	2.55	78.36			
103	120	22.969	0.0718	0.2448	30.71	25.99	2.55	78.36			
44	120	22.969	0.0718	0.2448	30.71	15.99	2.55	78.36			
14	120	22.969	0.0718	0.2448	30.71	5.99	2.55	78.36			