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Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=1000$ cd/m²

$B_{YT}^*(L_T, L_a, \phi) = C_T(\phi) L_T^n - B_a(L_a, \phi)$ brightness B_{YT}^* [1]
 $B_a(L_a, \phi) = C_T(\phi) [S_0(\phi) + S_1(\phi) L_a^n]$ (n=0,31) [2]
 $L_{LT}(L_a, \phi) = [S_0(\phi) + S_1(\phi) L_a^n]^{1/n}$ (=black threshold) [3]

L_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_a(L_a, \phi)$	B_{YT}^*	L_{LT}	L_a/L_T
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

hes10-1a j=0, $L_a=300$, $L_{aj}=1000$, $\phi=120^\circ$, $B_a=49.51$, $B_{YT}^*=145.98$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=1000$ cd/m²

$B_{YT}^*(L_T, L_a, \phi) = s_{Yra}(\phi) L_T^n - d_{Yra}(\phi)$ brightness B_{YT}^* [1]
 $B_a(L_a, \phi) = C_T(\phi) [S_0(\phi) + S_1(\phi) L_a^n]$ (n=0,31) [2]
 $s_{Yra}(\phi) = C_T(\phi)$ [3] $d_{Yra}(\phi) = B_a(L_a, \phi)$ [4] (s=scaling factor)

L_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_a(L_a, \phi)$	B_{YT}^*	$s_{Yra}(\phi)$	$d_{Yra}(\phi)$
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

hes10-2a j=0, $L_a=300$, $L_{aj}=1000$, $\phi=120^\circ$, $B_a=49.51$, $B_{YT}^*=145.98$, $s_{Yra}=22.96$, $d_{Yra}=49.51$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=40$ cd/m²

$B_{YT}^*(L_T, L_a, \phi) = C_T(\phi) L_T^n - B_a(L_a, \phi)$ brightness B_{YT}^* [1]
 $B_a(L_a, \phi) = C_T(\phi) [S_0(\phi) + S_1(\phi) L_a^n]$ (n=0,31) [2]
 $L_{LT}(L_a, \phi) = [S_0(\phi) + S_1(\phi) L_a^n]^{1/n}$ (=black threshold) [3]

L_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_a(L_a, \phi)$	B_{YT}^*	L_{LT}	L_a/L_T
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	65.97	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

hes11-1a j=2, $L_a=300$, $L_{aj}=40$, $\phi=120^\circ$, $B_a=19.29$, $B_{YT}^*=52.77$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=40$ cd/m²

$B_{YT}^*(L_T, L_r, \phi) = s_{Yra}(\phi) L_T^n - d_{Yra}(\phi)$ brightness B_{YT}^* [1]
 $B_a(L_a, \phi) = C_T(\phi) [S_0(\phi) + S_1(\phi) L_a^n]$ (n=0,31) [2]
 $s_{Yra}(\phi) = C_T(\phi)$ [3] $d_{Yra}(\phi) = B_a(L_a, \phi)$ [4] (s=scaling factor)

L_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_a(L_a, \phi)$	B_{YT}^*	$s_{Yra}(\phi)$	$d_{Yra}(\phi)$
109	120°	22.969	0.0718	0.2448	19.29	79.16	22.969	19.29
68	120°	22.969	0.0718	0.2448	19.29	65.97	22.969	19.29
39	120°	22.969	0.0718	0.2448	19.29	52.77	22.969	19.29
20	120°	22.969	0.0718	0.2448	19.29	39.58	22.969	19.29
9	120°	22.969	0.0718	0.2448	19.29	26.38	22.969	19.29
3	120°	22.969	0.0718	0.2448	19.29	13.19	22.969	19.29
0.56	120°	22.969	0.0718	0.2448	19.29	0.00	22.969	19.29
9	120°	22.969	0.0718	0.2448	19.83	26.38	22.969	19.29

hes11-2a j=2, $L_a=300$, $L_{aj}=40$, $\phi=120^\circ$, $B_a=19.29$, $B_{YT}^*=52.77$, $s_{Yra}=22.96$, $d_{Yra}=19.29$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=1000$ cd/m²

$B_{YT}^*(L_T, L_r, L_r, \phi) = [C_T(\phi) L_T^n - B_r(L_r, \phi)] B_{ra}^*$ brightness B_{YT}^* [1]
 $B_r(L_r, \phi) = C_T(\phi) [S_0(\phi) + S_1(\phi) L_r^n]$ (n=0,31, $B_{ra}^*=B_{YT}^*/B_{ra}^*$) [2]
 $L_{Yr}(L_a, \phi) = [S_0(\phi) + S_1(\phi) L_r^n]^{1/n} B_{ra}^*$ (=black threshold) [3]

Y_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_r(L_r, \phi)$	B_{YT}^*	L_{Yr}	L_a/L_T
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
151	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
151	120°	22.969	0.0718	0.2448	35.53	49.99	8.15	83.94

hes10-3a j=0, $L_a=300$, $L_{aj}=1000$, $\phi=120^\circ$, $B_r=34.60$, $B_{YT}^*=110.21$
hes10-3R j=0, $L_a=300$, $L_{aj}=1000$, $\phi=120^\circ$, $B_r=34.60$, $B_{YT}^*=110.21$, $s_{Yra}=15.73$, $d_{Yra}=33.9$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=1000$ cd/m²

$B_{YT}^*(L_T, L_r, L_r, \phi) = s_{Yra}(\phi) L_T^n - d_{Yra}(\phi)$ brightness B_{YT}^* [1]
 $B_r(L_r, \phi) = C_T(\phi) [S_0(\phi) + S_1(\phi) L_r^n]$ (n=0,31, $B_{ra}^*=B_{YT}^*/B_{ra}^*$) [2]
 $s_{Yra}(\phi)=C_T(\phi) B_{ra}^*$ [3] $d_{Yra}(\phi)=B_r(L_r, \phi) B_{ra}^*$ [4] (s=scaling factor)

Y_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_r(L_r, \phi)$	B_{YT}^*	$s_{Yra}(\phi)$	$d_{Yra}(\phi)$
1906	120°	22.969	0.0718	0.2448	34.60	149.99	15.73	33.91
1189	120°	22.969	0.0718	0.2448	34.60	124.99	15.73	33.91
684	120°	22.969	0.0718	0.2448	34.60	99.99	15.73	33.91
351	120°	22.969	0.0718	0.2448	34.60	74.99	15.73	33.91
151	120°	22.969	0.0718	0.2448	34.60	49.99	15.73	33.91
48	120°	22.969	0.0718	0.2448	34.60	24.99	15.73	33.91
11.91	120°	22.969	0.0718	0.2448	34.60	0.00	15.73	33.91
151	120°	22.969	0.0718	0.2448	35.53	49.99	15.73	33.91

hes10-4a j=0, $L_a=300$, $L_{aj}=1000$, $\phi=120^\circ$, $B_r=34.60$, $B_{YT}^*=110.21$, $s_{Yra}=15.73$, $d_{Yra}=33.9$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=40$ cd/m²

$B_{YT}^*(L_T, L_r, L_r, \phi) = [C_T(\phi) L_T^n - B_r(L_r, \phi)] B_{ra}^*$ brightness B_{YT}^* [1]
 $B_r(L_r, \phi) = C_T(\phi) [S_0(\phi) + S_1(\phi) L_r^n]$ (n=0,31, $B_{ra}^*=B_{YT}^*/B_{ra}^*$) [2]
 $L_{Yr}(L_a, \phi) = [S_0(\phi) + S_1(\phi) L_r^n]^{1/n} B_{ra}^*$ (=black threshold) [3]

Y_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_r(L_r, \phi)$	B_{YT}^*	L_{Yr}	L_a/L_T
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

hes11-3a j=2, $L_a=300$, $L_{aj}=40$, $\phi=120^\circ$, $B_r=34.60$, $B_{YT}^*=70.99$
hes11-3R j=2, $L_a=300$, $L_{aj}=40$, $\phi=120^\circ$, $B_r=34.60$, $B_{YT}^*=70.99$, $s_{Yra}=43.51$, $d_{Yra}=36.55$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=40$ cd/m²

$B_{YT}^*(L_T, L_r, L_r, \phi) = s_{Yra}(\phi) L_T^n - d_{Yra}(\phi)$ brightness B_{YT}^* [1]
 $B_r(L_r, \phi) = C_T(\phi) [S_0(\phi) + S_1(\phi) L_r^n]$ (n=0,31, $B_{ra}^*=B_{YT}^*/B_{ra}^*$) [2]
 $s_{Yra}(\phi)=C_T(\phi) B_{ra}^*$ [3] $d_{Yra}(\phi)=B_r(L_r, \phi) B_{ra}^*$ [4] (s=scaling factor)

Y_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_r(L_r, \phi)$	B_{YT}^*	$s_{Yra}(\phi)$	$d_{Yra}(\phi)$
207	120°	22.969	0.0718	0.2448	34.60	149.99	43.51	36.55
130	120°	22.969	0.0718	0.2448	34.60	124.99	43.51	36.55
75	120°	22.969	0.0718	0.2448	34.60	99.99	43.51	36.55
39	120°	22.969	0.0718	0.2448	34.60	74.99	43.51	36.55
17	120°	22.969	0.0718	0.2448	34.60	49.99	43.51	36.55
5	120°	22.969	0.0718	0.2448	34.60	24.99	43.51	36.55
0.56	120°	22.969	0.0718	0.2448	34.60	0.00	43.51	36.55
17	120°	22.969	0.0718	0.2448	35.53	49.99	43.51	36.55

hes11-4a j=2, $L_a=300$, $L_{aj}=40$, $\phi=120^\circ$, $B_r=34.60$, $B_{YT}^*=70.99$, $s_{Yra}=43.51$, $d_{Yra}=36.55$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=200$ cd/m²

$B_{YT}^*(L_T, L_a, \phi) = C_T(\phi) L_T^n - B_a(L_a, \phi)$ brightness B_{YT}^* [1]
 $B_a(L_a, \phi) = C_T(\phi) [S_0(\phi) + S_1(\phi) L_a^n]$ (n=0,31) [2]
 $L_{LT}(L_a, \phi) = [S_0(\phi) + S_1(\phi) L_a^n]^{1/n}$ (=black threshold) [3]

L_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_a(L_a, \phi)$	B_{YT}^*	L_{LT}	L_a/L_T
552	120°	22.969	0.0718	0.2448	30.71	131.98	2.55	78.36
346	120°	22.969	0.0718	0.2448	30.71	109.99	2.55	78.36
200	120°	22.969	0.0718	0.2448	30.71	87.99	2.55	78.36
103	120°	22.969	0.0718	0.2448	30.71	65.99	2.55	78.36
44	120°	22.969	0.0718	0.2448	30.71	43.99	2.55	78.36
14	120°	22.969	0.0718	0.2448	30.71	21.99	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	43.99	2.55	78.36

hes10-5a j=1, $L_a=300$, $L_{aj}=200$, $\phi=120^\circ$, $B_a=30.71$, $B_{YT}^*=87.99$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=200$ cd/m²

$B_{YT}^*(L_T, L_a, \phi) = s_{Yra}(\phi) L_T^n - d_{Yra}(\phi)$ brightness B_{YT}^* [1]
 $B_a(L_a, \phi) = C_T(\phi) [S_0(\phi) + S_1(\phi) L_a^n]$ (n=0,31) [2]
 $s_{Yra}(\phi) = C_T(\phi)$ [3] $d_{Yra}(\phi) = B_a(L_a, \phi)$ [4] (s=scaling factor)

L_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_a(L_a, \phi)$	B_{YT}^*	$s_{Yra}(\phi)$	$d_{Yra}(\phi)$
5								