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Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=1500$ 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]
 $L_{LT}(L_a, \phi) = [S_0(\phi) + S_1(\phi) L_a^n]^{1/n}$ (t=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
8372	120°	22.969	0.0718	0.2448	68.92	308.83	34.63	86.60
5219	120°	22.969	0.0718	0.2448	68.92	257.36	34.63	86.60
3000	120°	22.969	0.0718	0.2448	68.92	205.89	34.63	86.60
1536	120°	22.969	0.0718	0.2448	68.92	154.41	34.63	86.60
660	120°	22.969	0.0718	0.2448	68.92	102.94	34.63	86.60
209	120°	22.969	0.0718	0.2448	68.92	51.47	34.63	86.60
34.63	120°	22.969	0.0718	0.2448	68.92	0.00	34.63	86.60
660	120°	22.969	0.0718	0.2448	70.75	102.94	34.63	86.60

hes80-1a j=0, $L_a=3000$, $\phi=120^\circ$, $B_a=68.92$, $B_{YT}^*=205.89$, $s_x=22.96$, $d_{ca}=68.92$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=1500$ cd/m²

$B_{YT}^*(L_T, L_a, \phi) = s_x(\phi) L_T^n - d_{ca}(L_a, \phi)$ 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]
 $s_x(\phi) = C_T(\phi)$ [3] $d_{ca}(\phi) = B_a(L_a, \phi)$ [4] (s=scaling factor)

L_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_a(L_a, \phi)$	B_{YT}^*	$s_x(\phi)$	$d_{ca}(\phi)$
8372	120°	22.969	0.0718	0.2448	68.92	308.83	22.96	68.92
5219	120°	22.969	0.0718	0.2448	68.92	257.36	22.96	68.92
3000	120°	22.969	0.0718	0.2448	68.92	205.89	22.96	68.92
1536	120°	22.969	0.0718	0.2448	68.92	154.41	22.96	68.92
660	120°	22.969	0.0718	0.2448	68.92	102.94	22.96	68.92
209	120°	22.969	0.0718	0.2448	68.92	51.47	22.96	68.92
34.63	120°	22.969	0.0718	0.2448	68.92	0.00	22.96	68.92
660	120°	22.969	0.0718	0.2448	70.75	102.94	22.96	68.92

hes80-2a j=0, $L_a=3000$, $\phi=120^\circ$, $B_a=68.92$, $B_{YT}^*=205.89$, $s_x=22.96$, $d_{ca}=68.92$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=300$ 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]
 $L_{YT}(L_a, \phi) = [S_0(\phi) + S_1(\phi) L_r^n]^{1/n} B_{ra}^*$ (t=black threshold) [3]

Y_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_r(L_r, \phi)$	B_{YT}^*	L_{YT}	L_a/L_T
4066	120°	22.969	0.0718	0.2448	34.60	149.99	16.82	86.60
2535	120°	22.969	0.0718	0.2448	34.60	124.99	16.82	86.60
1457	120°	22.969	0.0718	0.2448	34.60	99.99	16.82	86.60
746	120°	22.969	0.0718	0.2448	34.60	74.99	16.82	86.60
320	120°	22.969	0.0718	0.2448	34.60	49.99	16.82	86.60
101	120°	22.969	0.0718	0.2448	34.60	24.99	16.82	86.60
34.63	120°	22.969	0.0718	0.2448	34.60	0.00	16.82	86.60
320	120°	22.969	0.0718	0.2448	35.53	49.99	16.82	86.60

hes80-3a j=0, $L_a=300$, $\phi=120^\circ$, $B_r=34.60$, $B_{YT}^*=116.67$
hes80-3R-R

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=300$ 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}^*	$s_{yra}(\phi)$	$d_{yra}(\phi)$
4066	120°	22.969	0.0718	0.2448	34.60	149.99	11.15	33.47
2535	120°	22.969	0.0718	0.2448	34.60	124.99	11.15	33.47
1457	120°	22.969	0.0718	0.2448	34.60	99.99	11.15	33.47
746	120°	22.969	0.0718	0.2448	34.60	74.99	11.15	33.47
320	120°	22.969	0.0718	0.2448	34.60	49.99	11.15	33.47
101	120°	22.969	0.0718	0.2448	34.60	24.99	11.15	33.47
16,82	120°	22.969	0.0718	0.2448	34.60	0.00	11.15	33.47
320	120°	22.969	0.0718	0.2448	35.53	49.99	11.15	33.47

hes80-4a j=0, $L_a=300$, $\phi=120^\circ$, $B_r=34.60$, $B_{YT}^*=116.67$, $s_{yra}=11.15$, $d_{yra}=33.47$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=300$ 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]
 $L_{LT}(L_a, \phi) = [S_0(\phi) + S_1(\phi) L_a^n]^{1/n}$ (t=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
831	120°	22.969	0.0718	0.2448	34.60	149.99	3.75	79.99
519	120°	22.969	0.0718	0.2448	34.60	124.99	3.75	79.99
300	120°	22.969	0.0718	0.2448	34.60	99.99	3.75	79.99
154	120°	22.969	0.0718	0.2448	34.60	74.99	3.75	79.99
67	120°	22.969	0.0718	0.2448	34.60	49.99	3.75	79.99
21	120°	22.969	0.0718	0.2448	34.60	24.99	3.75	79.99
3,75	120°	22.969	0.0718	0.2448	34.60	0.00	3.75	79.99
67	120°	22.969	0.0718	0.2448	35.53	49.99	3.75	79.99

hes80-5a j=1, $L_a=300$, $\phi=120^\circ$, $B_a=34.60$, $B_{YT}^*=99.99$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=300$ 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) [2]
 $s_x(\phi) = C_T(\phi)$ [3] $d_{ca}(\phi) = B_a(L_a, \phi)$ [4] (s=scaling factor)

L_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_a(L_a, \phi)$	B_{YT}^*	$s_x(\phi)$	$d_{ca}(\phi)$
831	120°	22.969	0.0718	0.2448	34.60	149.99	22.96	34.60
519	120°	22.969	0.0718	0.2448	34.60	124.99	22.96	34.60
300	120°	22.969	0.0718	0.2448	34.60	99.99	22.96	34.60
154	120°	22.969	0.0718	0.2448	34.60	74.99	22.96	34.60
67	120°	22.969	0.0718	0.2448	34.60	49.99	22.96	34.60
21	120°	22.969	0.0718	0.2448	34.60	24.99	22.96	34.60
3,75	120°	22.969	0.0718	0.2448	34.60	0.00	22.96	34.60
67	120°	22.969	0.0718	0.2448	35.53	49.99	22.96	34.60

hes80-6a j=1, $L_a=300$, $\phi=120^\circ$, $B_a=34.60$, $B_{YT}^*=99.99$, $s_x=22.96$, $d_{ca}=34.60$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=300$ 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]
 $L_{YT}(L_a, \phi) = [S_0(\phi) + S_1(\phi) L_r^n]^{1/n} B_{ra}^*$ (t=black threshold) [3]

Y_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_r(L_r, \phi)$	B_{YT}^*	L_{YT}	L_a/L_T
831	120°	22.969	0.0718	0.2448	34.60	149.99	3.75	79.99
519	120°	22.969	0.0718	0.2448	34.60	124.99	3.75	79.99
300	120°	22.969	0.0718	0.2448	34.60	99.99	3.75	79.99
154	120°	22.969	0.0718	0.2448	34.60	74.99	3.75	79.99
67	120°	22.969	0.0718	0.2448	34.60	49.99	3.75	79.99
21	120°	22.969	0.0718	0.2448	34.60	24.99	3.75	79.99
3,75	120°	22.969	0.0718	0.2448	34.60	0.00	3.75	79.99
67	120°	22.969	0.0718	0.2448	35.53	49.99	3.75	79.99

hes80-7a j=1, $L_a=300$, $\phi=120^\circ$, $B_r=34.60$, $B_{YT}^*=99.99$
hes80-3R-R

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=300$ 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}^*	$s_{yra}(\phi)$	$d_{yra}(\phi)$
831	120°	22.969	0.0718	0.2448	34.60	149.99	22.96	34.60
519	120°	22.969	0.0718	0.2448	34.60	124.99	22.96	34.60
300	120°	22.969	0.0718	0.2448	34.60	99.99	22.96	34.60
154	120°	22.969	0.0718	0.2448	34.60	74.99	22.96	34.60
67	120°	22.969	0.0718	0.2448	34.60	49.99	22.96	34.60
21	120°	22.969	0.0718	0.2448	34.60	24.99	22.96	34.60
3,75	120°	22.969	0.0718	0.2448	34.60	0.00	22.96	34.60
67	120°	22.969	0.0718	0.2448	35.53	49.99	22.96	34.60

hes80-8a j=1, $L_a=300$, $\phi=120^\circ$, $B_r=34.60$, $B_{YT}^*=99.99$, $s_{yra}=22.96$, $d_{yra}=34.60$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=30$ 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]
 $L_{LT}(L_a, \phi) = [S_0(\phi) + S_1(\phi) L_a^n]^{1/n}$ (t=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
81	120°	22.969	0.0718	0.2448	17.78	72.20	4.43	68.40
51	120°	22.969	0.0718	0.2448	17.78	60.16	4.43	68.40
30	120°	22.969	0.0718	0.2448	17.78	48.13	4.43	68.40
15	120°	22.969	0.0718	0.2448	17.78	36.10	4.43	68.40
6	120°	22.969	0.0718	0.2448	17.78	24.06	4.43	68.40
2	120°	22.969	0.0718	0.2448	17.78	12.03	4.43	68.40
0,43	120°	22.969	0.0718	0.2448	17.78	0.00	4.43	68.40
6	120°	22.969	0.0718	0.2448	18.28	24.06	4.43	68.40

hes81-1a j=2, $L_a=300$, $\phi=120^\circ$, $B_a=17.78$, $B_{YT}^*=48.13$

Relationship brightness B_{YT}^* and luminance L_T as function of tristimulus value Y_T for the adaptation luminance $L_a=30$ cd/m²

$B_{YT}^*(L_T, L_a, \phi) = s_x(\phi) L_T^n - d_{ca}(L_a, \phi)$ 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]
 $s_x(\phi) = C_T(\phi)$ [3] $d_{ca}(\phi) = B_a(L_a, \phi)$ [4] (s=scaling factor)

L_T	ϕ	$C_T(\phi)$	$S_0(\phi)$	$S_1(\phi)$	$B_a(L_a, \phi)$	B_{YT}^*	$s_x(\phi)$	$d_{ca}(\phi)$
81	120°	22.969	0.0718	0.2448	17.78	72.20	22.96	17.78
51	120°	22.969	0.0718	0.2448	17.78	60.16	22.96	17.78
30	120°	22.969	0.0718	0.2448	17.78	48.13	22.96	17.78
15	120°	22.969	0.0718	0.2448				