Relationship brightness B^*_{LT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=300 cd/m²

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

L_T	φ	$C_T(\varphi)$	ΔL	B^*/B^*_u	$B_a(L_a,\varphi)$	B^*_{LT}	L_{Lt}	L_a/L_t
14,84	120'	22,969	0,260	2,99 P	34,60	149,99	3,75	22,96
9,28	120'	22,969	0,188	2,49	35,53	124,99	3,75	22,96
5,35	120'	22,969	0,129	1,99 D	37,21	99,99	3,75	22,96
2,76	120'	22,969	0,082	1,49	40,48	74,99	3,75	22,96
1,19	120'	22,969	0,046	1,00 U	53,74	49,99	3,75	22,96
0,38	120'	22,969	0,021	0,50	63,91	24,99	3,75	22,96
3,75	120'	22,969	0,073	0,00 N	80,18	0,00	3,75	22,96
1,19	120'	22,969	0,046	1,00 U	53,74	49,99	3,75	22,96

hes90−1a j=0, L_t=300, L_{aj}=300, φ=120',

Relationship brightness B^*_{LT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=300 cd/m²

$B^*_{LT}(L_T, L_a, \varphi) = s_x(\varphi) L_T^n - d_{xa}(L_a, \varphi)$ brightness B^*_{LT} [1]
$B_a(L_a, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_a^n]$ (n=0,31) [2]
$s_x(\varphi) = C_T(\varphi)$ [3] $d_{xa}(\varphi) = B_a(L_a, \varphi)$ [4] (s=scaling factor)

L_T	φ	$C_T(\varphi)$	ΔL	B^*/B^*_u	$B_a(L_a,\varphi)$	B^*_{LT}	$s_x(\varphi)$	$d_{xa}(\varphi)$
14,84	120'	22,969	0,260	2,99 P	34,60	149,99	3,75	22,96
9,28	120'	22,969	0,188	2,49	35,53	124,99	3,75	22,96
5,35	120'	22,969	0,129	1,99 D	37,21	99,99	3,75	22,96
2,76	120'	22,969	0,082	1,49	40,48	74,99	3,75	22,96
1,19	120'	22,969	0,046	1,00 U	53,74	49,99	3,75	22,96
0,38	120'	22,969	0,021	0,50	63,91	24,99	3,75	22,96
3,75	120'	22,969	0,073	0,00 N	80,18	0,00	3,75	22,96
1,19	120'	22,969	0,046	1,00 U	53,74	49,99	3,75	22,96

hes90−2a j=0, L_t=300, L_{aj}=300, φ=120',

Relationship brightness B^*_{YT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=300 cd/m²

$B^*_{YT}(L_T, L_r, L_r, \varphi) = [C_T(\varphi) L_T^n - B_r(L_r, \varphi)] B^*_{ra}$ brightness B^*_{YT} [1]
$B_r(L_r, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_r^n]$ (n=0,31, $B^*_{ra}=B^*_{LT,r}/B^*_{LT,a}$) [2]
$L_{Yt}(L_a, \varphi) = [S_0(\varphi) + S_1(\varphi) L_r^n]^{1/n} B^*_{ra}$ (t=black threshold) [3]

Y_T	φ	$C_T(\varphi)$	ΔY	B^*/B^*_u	$B_r(L_r,\varphi)$	B^*_{YT}	L_{Yt}	L_a/L_t
14,84	120'	22,969	0,260	2,99 P	34,60	149,99	3,75	22,96
9,28	120'	22,969	0,188	2,49	35,53	124,99	3,75	22,96
5,35	120'	22,969	0,129	1,99 D	37,21	99,99	3,75	22,96
2,76	120'	22,969	0,082	1,49	40,48	74,99	3,75	22,96
1,19	120'	22,969	0,046	1,00 U	53,74	49,99	3,75	22,96
0,38	120'	22,969	0,021	0,50	63,91	24,99	3,75	22,96
3,75	120'	22,969	0,073	0,00 N	80,18	0,00	3,75	22,96
1,19	120'	22,969	0,046	1,00 U	53,74	49,99	3,75	22,96

hes90−3a j=0, L_t=300, L_{aj}=300, φ=120',

Relationship brightness B^*_{YT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=300 cd/m²

$B^*_{YT}(L_T, L_r, \varphi) = s_{yra}(\varphi) L_T^n - d_{yra}(\varphi)$ brightness B^*_{YT} [1]
$B_r(L_r, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_r^n]$ (n=0,31, $B^*_{ra}=B^*_{LT,r}/B^*_{LT,a}$) [2]
$s_{yra}(\varphi)=C_T(\varphi) B^*_{ra}$ [3] $d_{yra}(\varphi)=B_r(L_r, \varphi) B^*_{ra}$ [4] (s=scaling factor)

Y_T	φ	$C_T(\varphi)$	ΔY	B^*/B^*_u	$B_r(L_r,\varphi)$	B^*_{YT}	$s_{yra}(\varphi)$	$d_{yra}(\varphi)$
14,84	120'	22,969	0,260	2,99 P	34,60	149,99	3,75	22,96
9,28	120'	22,969	0,188	2,49	35,53	124,99	3,75	22,96
5,35	120'	22,969	0,129	1,99 D	37,21	99,99	3,75	22,96
2,76	120'	22,969	0,082	1,49	40,48	74,99	3,75	22,96
1,19	120'	22,969	0,046	1,00 U	53,74	49,99	3,75	22,96
0,38	120'	22,969	0,021	0,50	63,91	24,99	3,75	22,96
3,75	120'	22,969	0,073	0,00 N	80,18	0,00	3,75	22,96
1,19	120'	22,969	0,046	1,00 U	53,74	49,99	3,75	22,96

hes90−4a j=0, L_t=300, L_{aj}=300, φ=120',

hes90−3R_R

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

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

L_T	φ	$C_T(\varphi)$	ΔL	B^*/B^*_u	$B_a(L_a,\varphi)$	B^*_{LT}	L_{Lt}	L_a/L_t
42,53	120'	22,969	0,513	2,99 P	49,51	218,98	11,91	22,96
26,54	120'	22,969	0,370	2,50	50,82	182,48	11,91	22,96
15,28	120'	22,969	0,253	2,00 D	52,89	145,98	11,91	22,96
7,84	120'	22,969	0,160	1,49	57,37	109,49	11,91	22,96
3,38	120'	22,969	0,089	1,00 U	75,92	72,99	11,91	22,96
1,08	120'	22,969	0,041	0,50	90,28	36,49	11,91	22,96
11,91	120'	22,969	0,194	0,00 N	112,66	0,00	11,91	22,96
3,38	120'	22,969	0,089	1,00 U	75,92	72,99	11,91	22,96

hes90−5a j=1, L_t=300, L_{aj}=1000, φ=120',

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

$B^*_{LT}(L_T, L_a, \varphi) = s_x(\varphi) L_T^n - d_{xa}(L_a, \varphi)$ brightness B^*_{LT} [1]
$B_a(L_a, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_a^n]$ (n=0,31) [2]
$s_x(\varphi) = C_T(\varphi)$ [3] $d_{xa}(\varphi) = B_a(L_a, \varphi)$ [4] (s=scaling factor)

L_T	φ	$C_T(\varphi)$	ΔL	B^*/B^*_u	$B_a(L_a,\varphi)$	B^*_{LT}	$s_x(\varphi)$	$d_{xa}(\varphi)$
42,53	120'	22,969	0,513	2,99 P	49,51	218,98	11,91	22,96
26,54	120'	22,969	0,370	2,50	50,82	182,48	11,91	22,96
15,28	120'	22,969	0,253	2,00 D	52,89	145,98	11,91	22,96
7,84	120'	22,969	0,160	1,49	57,37	109,49	11,91	22,96
3,38	120'	22,969	0,089	1,00 U	75,92	72,99	11,91	22,96
1,08	120'	22,969	0,041	0,50	90,28	36,49	11,91	22,96
11,91	120'	22,969	0,194	0,00 N	112,66	0,00	11,91	22,96
3,38	120'	22,969	0,089	1,00 U	75,92	72,99	11,91	22,96

hes90−6a j=1, L_t=300, L_{aj}=1000, φ=120',

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

$B^*_{YT}(L_T, L_r, L_r, \varphi) = [C_T(\varphi) L_T^n - B_r(L_r, \varphi)] B^*_{ra}$ brightness B^*_{YT} [1]
$B_r(L_r, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_r^n]$ (n=0,31, $B^*_{ra}=B^*_{LT,r}/B^*_{LT,a}$) [2]
$L_{Yt}(L_a, \varphi) = [S_0(\varphi) + S_1(\varphi) L_r^n]^{1/n} B^*_{ra}$ (t=black threshold) [3]

Y_T	φ	$C_T(\varphi)$	ΔY	B^*/B^*_u	$B_r(L_r,\varphi)$	B^*_{YT}	L_{Yt}	L_a/L_t
42,53	120'	22,969	0,513	2,99 P	49,51	218,98	11,91	22,96
26,54	120'	22,969	0,370	2,50	50,82	182,48	11,91	22,96
15,28	120'	22,969	0,253	2,00 D	52,89	145,98	11,91	22,96
7,84	120'	22,969	0,160	1,49	57,37	109,49	11,91	22,96
3,38	120'	22,969	0,089	1,00 U	75,92	72,99	11,91	22,96
1,08	120'	22,969	0,041	0,50	90,28	36,49	11,91	22,96
11,91	120'	22,969	0,194	0,00 N	112,66	0,00	11,91	22,96
3,38	120'	22,969	0,089	1,00 U	75,92	72,99	11,91	22,96

hes90−7a j=1, L_t=300, L_{aj}=1000, φ=120',

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

$B^*_{YT}(L_T, L_r, \varphi) = s_{yra}(\varphi) L_T^n - d_{yra}(\varphi)$ brightness B^*_{YT} [1]
$B_r(L_r, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_r^n]$ (n=0,31, $B^*_{ra}=B^*_{LT,r}/B^*_{LT,a}$) [2]
$s_{yra}(\varphi)=C_T(\varphi) B^*_{ra}$ [3] $d_{yra}(\varphi)=B_r(L_r, \varphi) B^*_{ra}$ [4] (s=scaling factor)

Y_T	φ	$C_T(\varphi)$	ΔY	B^*/B^*_u	$B_r(L_r,\varphi)$	B^*_{YT}	$s_{yra}(\varphi)$	$d_{yra}(\varphi)$
42,53	120'	22,969	0,513	2,99 P	49,51	218,98	11,91	22,96
26,54	120'	22,969	0,370	2,50	50,82	182,48	11,91	22,96
15,28	120'	22,969	0,253	2,00 D	52,89	145,98	11,91	22,96
7,84	120'	22,969	0,160	1,49	57,37	109,49	11,91	22,96
3,38	120'	22,969	0,089	1,00 U	75,92	72,99	11,91	22,96
1,08	120'	22,969	0,041	0,50	90,28	36,49	11,91	22,96
11,91	120'	22,969	0,194	0,00 N	112,66	0,00	11,91	22,96
3,38	120'	22,969	0,089	1,00 U	75,92	72,99	11,91	22,96

hes90−8a j=1, L_t=300, L_{aj}=1000, φ=120',

hes90−3R_R

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

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

L_T	φ	$C_T(\varphi)$	ΔL	B^*/B^*_u	$B_a(L_a,\varphi)$	B^*_{LT}	L_{Lt}	L_a/L_t
10,55	120'	22,969	0,210	3,00 P	30,71	131,98	2,55	22,96
6,60	120'	22,969	0,152	2,50	31,54	109,99	2,55	22,96
3,81	120'	22,969	0,104	2,00 D	33,11	87,99	2,55	22,96
1,97	120'	22,969	0,066	1,50	36,07	65,99	2,55	22,96
0,85	120'	22,969	0,037	1,00 U	47,94	43,99	2,55	22,96
0,27	120'	22,969	0,017	0,50	57,02	21,99	2,55	22,96
2,55	120'	22,969	0,054	0,00 N	71,70	0,00	2,55	22,96
0,85	120'	22,969	0,037	1,00 U	47,94	43,99	2,55	22,96

hes91−1a j=2, L_t=300, L_{aj}=200, φ=120',

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

$B^*_{LT}(L_T, L_a, \varphi) = s_x(\varphi) L_T^n - d_{xa}(L_a, \varphi)$ brightness B^*_{LT} [1]
$B_a(L_a, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_a^n]$ (n=0,31) [2]
$s_x(\varphi) = C_T(\varphi)$ [3] $d_{xa}(\varphi) = B_a(L_a, \varphi)$ [4] (s=scaling factor)

L_T	φ	$C_T(\varphi)$	ΔL	B^*/B^*_u	$B_a(L_a,\varphi)$	B^*_{LT}	$s_x(\varphi)$	$d_{xa}(\varphi)$
10,55	120'	22,969	0,210	3,00 P	30,71	131,98	2,55	22,96
6,60	120'	22,969	0,152	2,50	31,54	109,99	2,55	22,96
3,81	120'	22,969	0,104	2,00 D	33,11	87,99	2,55	22,96
1,97	120'	22,969	0,066	1,50	36,07	65,99	2,55	22,96
0,85	120'	22,969	0,037	1,00 U	47,94	43,99	2,55	22,96
0,27	120'	22,969	0,017	0,50	57,02	21,99	2,55	22,96
2,55	120'	22,969	0,054	0,00 N	71,70	0,00	2,55	22,96
0,85	120'	22,969	0,037	1,00 U	47,94	43,99	2,55	22,96

hes91−2a j=2, L_t=300, L_{aj}=200, φ=120',

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

$B^*_{YT}(L_T, L_r, L_r, \varphi) = [C_T(\varphi) L_T^n - B_r(L_r, \varphi)] B^*_{ra}$ brightness B^*_{YT} [1]
$B_r(L_r, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_r^n]$ (n=0,31, $B^*_{ra}=B^*_{LT,r}/B^*_{LT,a}$) [2]
$L_{Yt}(L_a, \varphi) = [S_0(\varphi) + S_1(\varphi) L_r^n]^{1/n} B^*_{ra}$ (t=black threshold) [3]

Y_T	φ	$C_T(\varphi)$	ΔY	B^*/B^*_u	$B_r(L_r,\varphi)$	B^*_{YT}	L_{Yt}	L_a/L_t
10,55	120'	22,969	0,210	3,00 P	30,71	131,98	2,55	22,96
6,60	120'	22,969	0,152	2,50	31,54	109,99	2,55	22,96
3,81	120'	22,969	0,104	2,00 D	33,11	87,99	2,55	22,96
1,97	120'	22,969	0,066	1,50	36,07	65,99	2,55	22,96
0,85	120'	22,969	0,037	1,00 U	47,94	43,99	2,55	22,96
0,27	120'	22,969	0,017	0,50	57,02	21,99	2,55	22,96
2,55	120'	22,969	0,054	0,00 N	71,70	0,00	2,55	22,96
0,85	120'	22,969	0,037	1,00 U	47,94	43,99	2,55	22,96

hes91−3a j=2, L_t=300, L_{aj}=200, φ=120',

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

$B^*_{YT}(L_T, L_r, \varphi) = s_{yra}(\varphi) L_T^n - d_{yra}(\varphi)$ brightness B^*_{YT} [1]
$B_r(L_r, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_r^n]$ (n=0,31, $B^*_{ra}=B^*_{LT,r}/B^*_{LT,a}$) [2]
$s_{yra}(\varphi)=C_T(\varphi) B^*_{ra}$ [3] $d_{yra}(\varphi)=B_r(L_r, \varphi) B^*_{ra}$ [4] (s=scaling factor)

Y_T	φ	$C_T(\varphi)$	ΔY	B^*/B^*_u	$B_r(L_r,\varphi)$	B^*_{YT}	$s_{yra}(\varphi)$	$d_{yra}(\varphi)$
10,55	120'	22,969	0,210	3,00 P	30,71	131,98	2,55	22,96
6,60	120'	22,969	0,152	2,50	31,54	109,99	2,55	22,96
3,81	120'	22,969	0,104	2,00 D	33,11	87,99	2,55	22,96
1,97	120'	22,969	0,066	1,50	36,07	65,99	2,55	22,96
0,85	120'	22,969	0,037	1,00 U	47,94	43,99	2,55	22,96
0,27	120'	22,969	0,017	0,50	57,02	21,99	2,55	22,96
2,55	120'	22,969	0,054	0,00 N	71,70	0,00	2,55	22,96
0,85	120'	22,969	0,037	1,00 U	47,94	43,99	2,55	22,96

hes91−4a j=2, L_t=300, L_{aj}=200, φ=120',

hes90−3R_R

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

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

L_T	φ	$C_T(\varphi)$	ΔL	B^*/B^*_u	$B_a(L_a,\varphi)$	B^*_{LT}	L_{Lt}	L_a/L_t
2,98	120'	22,969	0,098	3,00 P	19,29	79,16	0,56	22,96
1,87	120'	22,969	0,071	2,50	19,83	65,97	0,56	22,96
1,08	120'	22,969	0,049	2,00 D	21,10	52,77	0,56	22,96
0,56	120'	22,969	0,031	1,50	23,14	39,58	0,56	22,96
0,25	120'	22,969	0,018	1,00 U	30,96	26,38	0,56	22,96
0,08	120'	22,969	0,008	0,50	36,83	13,19	0,56	22,96
0,56	120'	22,969	0,018	0,00 N	46,83	0,00	0,56	22,96
0,25	120'	22,969	0,018	1,00 U	30,96	26,38	0,56	22,96

hes91−5a j=3, L_t=300, L_{aj}=40, φ=120',

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

$B^*_{LT}(L_T, L_a, \varphi) = s_x(\varphi) L_T^n - d_{xa}(L_a, \varphi)$ brightness B^*_{LT} [1]
$B_a(L_a, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_a^n]$ (n=0,31) [2]
$s_x(\varphi) = C_T(\varphi)$ [3] $d_{xa}(\varphi) = B_a(L_a, \varphi)$ [4] (s=scaling factor)

L_T	φ	$C_T(\varphi)$	ΔL	B^*/B^*_u	$B_a(L_a,\varphi)$	B^*_{LT}	$s_x(\varphi)$	$d_{xa}(\varphi)$
2,98	120'	22,969	0,098	3,00 P	19,29	79,16	0,56	22,96
1,87	120'	22,969	0,071	2,50	19,83	65,97	0,56	22,96
1,08	120'	22,969	0,049	2,00 D	21,10	52,77	0,56	22,96
0,56	120'	22,969	0,031	1,50	23,14	39,58	0,56	22,96
0,25	120'	22,969	0,018	1,00 U	30,96	26,38	0,56	22,96
0,08	120'	22,969	0,008	0,50	36,83	13,19	0,56	22,96
0,56	120'	22,969	0,018	0,00 N	46,83	0,00	0,56	22,96
0,25	120'	22,969	0,018	1,00 U	30,96	26,38	0,56	22,96

hes91−6a j=3, L_t=300, L_{aj}=40, φ=120',

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

$B^*_{YT}(L_T, L_r, L_r, \varphi) = [C_T(\varphi) L_T^n - B_r(L_r, \varphi)] B^*_{ra}$ brightness B^*_{YT} [1]
$B_r(L_r, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_r^n]$ (n=0,31, $B^*_{ra}=B^*_{LT,r}/B^*_{LT,a}$) [2]
$L_{Yt}(L_a, \varphi) = [S_0(\varphi) + S_1(\varphi) L_r^n]^{1/n} B^*_{ra}$ (t=black threshold) [3]

Y_T	φ	$C_T(\varphi)$	ΔY	B^*/B^*_u	$B_r(L_r,\varphi)$	B^*_{YT}	L_{Yt}	L_a/L_t
2,98	120'	22,969	0,098	3,00 P	19,29	79,16	0,56	22,96
1,87	120'	22,969	0,071	2,50	19,83	65,97	0,56	22,96
1,08	120'	22,969	0,049	2,00 D	21,10	52,77	0,56	22,96
0,56	120'	22,969	0,031	1,50	23,14	39,58	0,56	22,96
0,25	120'	22,969	0,018	1,00 U	30,96	26,38	0,56	22,96
0,08	120'	22,969	0,008	0,50	36,83	13,19	0,56	22,96
0,56	120'	22,969	0,018	0,00 N	46,83	0,00	0,56	22,96
0,25	120'	22,969	0,018	1,00 U	30,96	26,38	0,56	22,96

hes91−7a j=3, L_t=300, L_{aj}=40, φ=120',

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

$B^*_{YT}(L_T, L_r, \varphi) = s_{yra}(\varphi) L_T^n - d_{yra}(\varphi)$ brightness B^*_{YT} [1]
$B_r(L_r, \varphi) = C_T(\varphi)[S_0(\varphi) + S_1(\varphi) L_r^n]$ (n=0,31, $B^*_{ra}=B^*_{LT,r}/B^*_{LT,a}$) [2]
$s_{yra}(\varphi)=C_T(\varphi) B^*_{ra}$ [3] $d_{yra}(\varphi)=B_r(L_r, \varphi) B^*_{ra}$ [4] (s=scaling factor)

Y_T	φ	$C_T(\varphi)$	ΔY	B^*/B^*_u	$B_r(L_r,\varphi)$	B^*_{YT}	$s_{yra}(\varphi)$	$d_{yra}(\varphi)$
2,98	120'	22,969	0,098	3,00 P	19,29	79,16	0,56	22,96
1,87	120'	22,969	0,071	2,50	19,83	65,97	0,56	22,96
1,08	120'	22,969	0,049	2,00 D	21,10	52,77	0,56	22,96
0,56	120'	22,969	0,031	1,50	23,14	39,58	0,56	22,96
0,25	120'	22,969	0,018	1,00 U	30,96	26,38	0,56	22,96
0,08	120'	22,969	0,008	0,50	36,83	13,19	0,56	22,96
0,56	120'	22,969	0,018	0,00 N	46,83	0,00	0,56	22,96
0,25	120'	22,969	0,018	1,00 U	30,96	26,38	0,56	22,96

hes91−8a j=3, L_t=300, L_{aj}=40, φ=120',

hes90−3R_R

TUB-test chart hes9; HAULAB, scaling of achromatic colours in white surround of 180 degree, *Haubner* (1980), Adaptations L_{wa}=300, 1000, 200 & 40cd/m²; 7 test luminances for 120'