http://farbe.li.tu-berlin.de/hes7/hes7l0n1.txt /.ps; only vector graphic VG; start output
see separate images of this page: http://farbe.li.tu-berlin.de/hes7/hes7.htm

see similar files of the whole serie: http://farbe.li.tu-berlin.de/hess.htm
technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

TUB registration: 20241201-hes7/hes7l0n1.txt /.ps
application for evaluation and measurement of display or print output
TUB material: code=rha4ta

Relationship brightness B^*_{LT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=1500 cd/m^2

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

L_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_a(L_a,φ)$	B^*_{LT}	L_{Lt}	L_a/L_t
3000	120’	22,969	0,0718	0,2448	68,92	205,89	34,63	86,60
3000	100’	23,128	0,0747	0,2494	68,92	205,89	34,63	86,60
3000	90’	23,415	0,1086	0,2526	68,92	205,97	36,85	81,41
3000	60’	23,973	0,1313	0,2657	68,92	206,83	39,74	75,48
3000	30’	26,235	0,1797	0,3188	68,92	207,45	47,58	63,05
3000	20’	27,971	0,2013	0,3555	68,92	209,08	87,17	34,41
3000	10’	30,747	0,2730	0,3984	68,92	210,03	123,95	24,20
3000	120’	22,969	0,0718	0,2448	68,92	205,89	34,63	86,60

hes70−1a j=0, L_r=300, L_{aj}=3000, φ=120’, B_a=68,92, B^*_{LT}=205,89

Relationship brightness B^*_{LT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=1500 cd/m^2

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

L_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_a(L_a,φ)$	B^*_{LT}	$s_x(φ)$	$d_{xa}(φ)$
3000	120’	22,969	0,0718	0,2448	68,92	205,89	22,96	68,92
3000	100’	23,128	0,0747	0,2494	68,92	205,89	22,96	68,92
3000	90’	23,415	0,1086	0,2526	68,92	205,97	23,12	70,75
3000	60’	23,973	0,1313	0,2657	68,92	206,83	23,41	73,32
3000	30’	26,235	0,1797	0,3188	68,92	207,45	23,97	79,38
3000	20’	27,971	0,2013	0,3555	68,92	209,08	26,23	104,81
3000	10’	30,747	0,2730	0,3984	68,92	210,03	27,97	124,62
3000	120’	22,969	0,0718	0,2448	68,92	205,89	22,96	68,92

hes70−2a j=0, L_r=300, L_{aj}=3000, φ=120’, B_a=68,92, B^*_{LT}=205,89, s_x=22,96, d_{xa}=68,92

Relationship brightness B^*_{LT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=30 cd/m^2

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

L_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_a(L_a,φ)$	B^*_{LT}	L_{Lt}	L_a/L_t
30	120’	22,969	0,0718	0,2448	17,78	48,13	0,43	68,40
30	100’	23,128	0,0747	0,2494	17,78	48,09	0,46	64,00
30	90’	23,415	0,1086	0,2526	17,78	47,68	0,55	53,91
30	60’	23,973	0,1313	0,2657	17,78	47,37	0,69	43,03
30	30’	26,235	0,1797	0,3188	17,78	46,57	1,34	22,38
30	20’	27,971	0,2013	0,3555	17,78	46,10	1,90	15,71
30	10’	30,747	0,2730	0,3984	17,78	44,69	3,07	9,75
30	120’	22,969	0,0718	0,2448	17,78	48,13	0,43	68,40

hes71−1a j=2, L_r=300, L_{aj}=30, φ=120’, B_a=17,78, B^*_{LT}=48,13

Relationship brightness B^*_{LT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=30 cd/m^2

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

L_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_a(L_a,φ)$	B^*_{LT}	$s_x(φ)$	$d_{xa}(φ)$
30	120’	22,969	0,0718	0,2448	17,78	48,13	22,96	17,78
30	100’	23,128	0,0747	0,2494	17,78	48,09	23,12	18,28
30	90’	23,415	0,1086	0,2526	17,78	47,68	23,41	19,52
30	60’	23,973	0,1313	0,2657	17,78	47,37	23,97	21,43
30	30’	26,235	0,1797	0,3188	17,78	46,57	26,23	28,72
30	20’	27,971	0,2013	0,3555	17,78	46,10	27,97	34,17
30	10’	30,747	0,2730	0,3984	17,78	44,69	30,74	43,55
30	120’	22,969	0,0718	0,2448	17,78	48,13	22,96	17,78

hes71−2a j=2, L_r=300, L_{aj}=30, φ=120’, B_a=17,78, B^*_{LT}=48,13, s_x=22,96, d_{xa}=17,78

Relationship brightness B^*_{YT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=1500 cd/m^2

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

Y_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_r(L_r,φ)$	B^*_{YT}	L_{Yt}	L_a/L_t
3000	120’	22,969	0,0718	0,2448	34,60	116,67	16,82	86,60
3000	100’	23,128	0,0747	0,2494	34,60	116,67	16,82	86,60
3000	90’	23,415	0,1086	0,2526	34,60	117,14	17,89	81,41
3000	60’	23,973	0,1313	0,2657	34,60	117,99	19,30	75,48
3000	30’	26,235	0,1797	0,3188	34,60	119,64	23,10	63,05
3000	20’	27,971	0,2013	0,3555	34,60	126,35	42,34	34,41
3000	10’	30,747	0,2730	0,3984	34,60	131,50	60,20	24,20
3000	120’	22,969	0,0718	0,2448	34,60	116,67	16,82	86,60

hes70−3a j=0, L_r=300, L_{aj}=3000, φ=120’, B_r=34,60, B^*_{YT}=116,67

Relationship brightness B^*_{YT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=1500 cd/m^2

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

Y_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_r(L_r,φ)$	B^*_{YT}	$s_{yra}(φ)$	$d_{yra}(φ)$
3000	120’	22,969	0,0718	0,2448	34,60	116,67	11,15	33,47
3000	100’	23,128	0,0747	0,2494	34,60	116,67	11,15	33,47
3000	90’	23,415	0,1086	0,2526	34,60	117,14	11,23	34,36
3000	60’	23,973	0,1313	0,2657	34,60	117,99	11,37	35,61
3000	30’	26,235	0,1797	0,3188	34,60	119,64	11,64	38,55
3000	20’	27,971	0,2013	0,3555	34,60	126,35	12,74	50,90
3000	10’	30,747	0,2730	0,3984	34,60	131,50	13,58	60,53
3000	120’	22,969	0,0718	0,2448	34,60	116,67	11,15	33,47

hes70−4a j=0, L_r=300, L_{aj}=3000, φ=120’, B_r=34,60, B^*_{YT}=116,67, s_{yra}=11,15, d_{yra}=33,47

hes70−3R_R

Relationship brightness B^*_{YT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=30 cd/m^2

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

Y_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_r(L_r,φ)$	B^*_{YT}	L_{Yt}	L_a/L_t
30	120’	22,969	0,0718	0,2448	34,60	65,07	0,91	68,40
30	100’	23,128	0,0747	0,2494	34,60	64,08	0,97	64,00
30	90’	23,415	0,1086	0,2526	34,60	62,30	1,15	53,91
30	60’	23,973	0,1313	0,2657	34,60	58,83	1,44	43,03
30	30’	26,235	0,1797	0,3188	34,60	44,78	2,78	22,38
30	20’	27,971	0,2013	0,3555	34,60	34,00	3,96	15,71
30	10’	30,747	0,2730	0,3984	34,60	16,75	6,38	9,75
30	120’	22,969	0,0718	0,2448	34,60	65,07	0,91	68,40

hes71−3a j=2, L_r=300, L_{aj}=30, φ=120’, B_r=34,60, B^*_{YT}=65,07

Relationship brightness B^*_{YT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=30 cd/m^2

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

Y_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_r(L_r,φ)$	B^*_{YT}	$s_{yra}(φ)$	$d_{yra}(φ)$
30	120’	22,969	0,0718	0,2448	34,60	65,07	47,71	36,95
30	100’	23,128	0,0747	0,2494	34,60	64,08	48,04	37,98
30	90’	23,415	0,1086	0,2526	34,60	62,30	48,64	40,56
30	60’	23,973	0,1313	0,2657	34,60	58,83	49,80	44,53
30	30’	26,235	0,1797	0,3188	34,60	44,78	54,50	59,67
30	20’	27,971	0,2013	0,3555	34,60	34,00	58,10	71,00
30	10’	30,747	0,2730	0,3984	34,60	16,75	63,87	90,48
30	120’	22,969	0,0718	0,2448	34,60	65,07	47,71	36,95

hes71−4a j=2, L_r=300, L_{aj}=30, φ=120’, B_r=34,60, B^*_{YT}=65,07, s_{yra}=47,71, d_{yra}=36,95

hes70−3R_R

Relationship brightness B^*_{LT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=300 cd/m^2

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

L_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_a(L_a,φ)$	B^*_{LT}	L_{Lt}	L_a/L_t
300	120’	22,969	0,0718	0,2448	34,60	99,99	3,75	79,99
300	100’	23,128	0,0747	0,2494	34,60	99,99	3,99	75,07
300	90’	23,415	0,1086	0,2526	34,60	100,00	4,45	67,31
300	60’	23,973	0,1313	0,2657	34,60	99,99	5,42	55,33
300	30’	26,235	0,1797	0,3188	34,60	100,00	10,10	29,68
300	20’	27,971	0,2013	0,3555	34,60	99,99	14,37	20,86
300	10’	30,747	0,2730	0,3984	34,60	99,99	22,02	13,62
300	120’	22,969	0,0718	0,2448	34,60	99,99	3,75	79,99

hes70−5a j=1, L_r=300, L_{aj}=300, φ=120’, B_a=34,60, B^*_{LT}=99,99

Relationship brightness B^*_{LT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=300 cd/m^2

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

L_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_a(L_a,φ)$	B^*_{LT}	$s_x(φ)$	$d_{xa}(φ)$
300	120’	22,969	0,0718	0,2448	34,60	99,99	22,96	34,60
300	100’	23,128	0,0747	0,2494	34,60	99,99	23,12	35,53
300	90’	23,415	0,1086	0,2526	34,60	100,00	23,41	37,21
300	60’	23,973	0,1313	0,2657	34,60	99,99	23,97	40,48
300	30’	26,235	0,1797	0,3188	34,60	100,00	26,23	53,74
300	20’	27,971	0,2013	0,3555	34,60	99,99	27,97	63,91
300	10’	30,747	0,2730	0,3984	34,60	99,99	30,74	80,18
300	120’	22,969	0,0718	0,2448	34,60	99,99	22,96	34,60

hes70−6a j=1, L_r=300, L_{aj}=300, φ=120’, B_a=34,60, B^*_{YT}=99,99, s_x=22,96, d_{xa}=34,60

Relationship brightness B^*_{LT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=3 cd/m^2

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

L_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_a(L_a,φ)$	B^*_{LT}	L_{Lt}	L_a/L_t
3	120’	22,969	0,0718	0,2448	9,55	22,73	0,05	50,79
3	100’	23,128	0,0747	0,2494	9,55	22,67	0,06	47,27
3	90’	23,415	0,1086	0,2526	9,55	22,05	0,08	35,75
3	60’	23,973	0,1313	0,2657	9,55	21,59	0,11	27,18
3	30’	26,235	0,1797	0,3188	9,55	20,40	0,22	13,45
3	20’	27,971	0,2013	0,3555	9,55	19,70	0,31	9,42
3	10’	30,747	0,2730	0,3984	9,55	17,60	0,55	5,40
3	120’	22,969	0,0718	0,2448	9,55	22,73	0,05	50,79

hes71−5a j=3, L_r=300, L_{aj}=3, φ=120’, B_a=9,55, B^*_{LT}=22,73

Relationship brightness B^*_{LT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=3 cd/m^2

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

L_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_a(L_a,φ)$	B^*_{LT}	$s_x(φ)$	$d_{xa}(φ)$
3	120’	22,969	0,0718	0,2448	9,55	22,73	22,96	9,55
3	100’	23,128	0,0747	0,2494	9,55	22,67	23,12	9,83
3	90’	23,415	0,1086	0,2526	9,55	22,05	23,41	10,86
3	60’	23,973	0,1313	0,2657	9,55	21,59	23,97	12,10
3	30’	26,235	0,1797	0,3188	9,55	20,40	26,23	16,47
3	20’	27,971	0,2013	0,3555	9,55	19,70	27,97	19,61
3	10’	30,747	0,2730	0,3984	9,55	17,60	30,74	25,61
3	120’	22,969	0,0718	0,2448	9,55	22,73	22,96	9,55

hes71−6a j=3, L_r=300, L_{aj}=3, φ=120’, B_a=9,55, B^*_{YT}=22,73, s_x=22,96, d_{xa}=9,55

Relationship brightness B^*_{YT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=300 cd/m^2

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

Y_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_r(L_r,φ)$	B^*_{YT}	L_{Yt}	L_a/L_t
300	120’	22,969	0,0718	0,2448	34,60	99,99	3,75	79,99
300	100’	23,128	0,0747	0,2494	34,60	99,99	3,99	75,07
300	90’	23,415	0,1086	0,2526	34,60	100,00	4,45	67,31
300	60’	23,973	0,1313	0,2657	34,60	99,99	5,42	55,33
300	30’	26,235	0,1797	0,3188	34,60	100,00	10,10	29,68
300	20’	27,971	0,2013	0,3555	34,60	99,99	14,37	20,86
300	10’	30,747	0,2730	0,3984	34,60	99,99	22,02	13,62
300	120’	22,969	0,0718	0,2448	34,60	99,99	3,75	79,99

hes70−7a j=1, L_r=300, L_{aj}=300, φ=120’, B_r=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/m^2

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

Y_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_r(L_r,φ)$	B^*_{YT}	$s_{yra}(φ)$	$d_{yra}(φ)$
300	120’	22,969	0,0718	0,2448	34,60	99,99	22,96	34,60
300	100’	23,128	0,0747	0,2494	34,60	99,99	23,12	35,53
300	90’	23,415	0,1086	0,2526	34,60	100,00	23,41	37,21
300	60’	23,973	0,1313	0,2657	34,60	99,99	23,97	40,48
300	30’	26,235	0,1797	0,3188	34,60	100,00	26,23	53,74
300	20’	27,971	0,2013	0,3555	34,60	99,99	27,97	63,91
300	10’	30,747	0,2730	0,3984	34,60	99,99	30,74	80,18
300	120’	22,969	0,0718	0,2448	34,60	99,99	22,96	34,60

hes70−8a j=1, L_r=300, L_{aj}=300, φ=120’, B_r=34,60, B^*_{YT}=99,99, s_{yra}=22,96, d_{yra}=34,60

hes70−3R_R

Relationship brightness B^*_{YT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=3 cd/m^2

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

Y_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_r(L_r,φ)$	B^*_{YT}	L_{Yt}	L_a/L_t
3	120’	22,969	0,0718	0,2448	34,60	−10,17	0,25	50,79
3	100’	23,128	0,0747	0,2494	34,60	−13,29	0,27	47,27
3	90’	23,415	0,1086	0,2526	34,60	−18,89	0,36	35,75
3	60’	23,973	0,1313	0,2657	34,60	−29,85	0,48	27,18
3	30’	26,235	0,1797	0,3188	34,60	−74,16	0,98	13,45
3	20’	27,971	0,2013	0,3555	34,60	−108,18	1,39	9,42
3	10’	30,747	0,2730	0,3984	34,60	−162,58	2,44	5,40
3	120’	22,969	0,0718	0,2448	34,60	−10,17	0,25	50,79

hes71−7a j=3, L_r=300, L_{aj}=3, φ=120’, B_r=34,60, B^*_{YT}=−10,17

Relationship brightness B^*_{YT} and luminance L_T as function of tristimulus value Y_T for the adaptation luminance L_a=3 cd/m^2

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

Y_T	φ	$C_T(φ)$	$S_0(φ)$	$S_1(φ)$	$B_r(L_r,φ)$	B^*_{YT}	$s_{yra}(φ)$	$d_{yra}(φ)$
3	120’	22,969	0,0718	0,2448	34,60	−10,17	101,03	42,03
3	100’	23,128	0,0747	0,2494	34,60	−13,29	101,73	43,27
3	90’	23,415	0,1086	0,2526	34,60	−18,89	102,99	47,77
3	60’	23,973	0,1313	0,2657	34,60	−29,85	105,45	53,24
3	30’	26,235	0,1797	0,3188	34,60	−74,16	115,40	72,47
3	20’	27,971	0,2013	0,3555	34,60	−108,18	123,03	86,26
3	10’	30,747	0,2730	0,3984	34,60	−162,58	135,24	112,68
3	120’	22,969	0,0718	0,2448	34,60	−10,17	101,03	42,03

hes71−8a j=3, L_r=300, L_{aj}=3, φ=120’, B_r=34,60, B^*_{YT}=−10,17, s_{yra}=101,03, d_{yra}=42,03

hes70−3R_R

TUB-test chart hes7; HAULAB, scaling of achromatic colours in white surround of 180 degree,
Haubner (1980), Adaptations L_{wa}=1500, 300, 30 & 3cd/m^2; 7 viewing angles 120’ to 10’